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REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA  
For the Week Ending Tuesday, August 2, 1938.

*Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau*  
Offices: Federal Office Building, Helena, Montana.

Weather conditions continued favorable for the growth of irrigated crops and rapid ripening of winter wheat and early sown grains. Where moisture was lacking, above normal temperatures and too much sunshine caused firing of later maturing spring grains on dry-lands and some reduction of prospective yield. Light showers during the week were of little or no benefit. More rain continues to be needed for maturing late sown dryland crops, as well as for freshening pastures and ranges. Moisture conditions in summerfallow ground were reported good for late summer and fall seeding.

Harvest operations assumed State-wide importance as farmers moved into fields generally with binders and combines for harvesting the greatest wheat and other grain crop in the last several years. Early harvested winter wheat is of good quality and is yielding well. Heavy straw and lodging has made some fields difficult of harvest, and premature cutting to avoid grasshopper and rust damage has resulted in some shrivelling of the grain in eastern counties. Rye and barley has been cut. As usual, and to avoid loss from insects, some grain has been cut for hay. Harvesting of the spring wheat crop will not get underway generally for about another ten days. There has been little or no grasshopper damage in western and most central counties to date, but in eastern counties variable amount of damage to grain, alfalfa, and corn has occurred from migrations into the State since July 1st. Webworm infestations from the first cycle have about ceased, and sugar beets, garden truck, and other attacked vegetation have begun to make some recovery where not too badly damaged. The pea harvest is about completed in western districts with generally good yields reported. Beans have made heavy growth, and earliest advanced plantings in Carbon County are nearing the ripening stage. Sugar beets have progressed nicely. Tomatoes and potatoes are still being attacked by the "purple top" disease in several southern districts. Potatoes are reported poor in Stillwater County. Fruit is reported in good condition.

Range grasses are curing on all but the higher levels. Feed is plentiful, however, and there is ample water for all livestock. The first crop of alfalfa is in the stack, and the second crop under irrigation is being cut or about ready for cutting. The second crop of alfalfa on the drylands is expected to produce a fair crop and add to feed reserves. Wild hay harvest continues in full swing with yields heavier in general than has occurred for the last several years.

Livestock are in fine flesh. Sleeping sickness continues spreading among horses in eastern counties and has resulted in some shortage of animals for haying and harvesting operations. Ten percent of the horses are reported affected in Garfield and Petroleum Counties, and a mortality rate of 25 percent has occurred in Fallon and Carter Counties. Several carloads of lambs were reported marketed from Lake County.

TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING AUG. 2, 1938

Station	Sunshine			Total Precipitation		
	Temperature Highest	Temperature Lowest	% of Possible	This Week	From April 1st to date	For Corresponding Period in 1937
Billings	94	56	*	0.07	11.89	6.92
Bozeman	86	47	*	0.09	10.20	9.48
Conrad	*	*	*	0.04	9.00#	7.74
Cut Bank	87	46	*	0.00	9.68	6.43
Fort Peck	92	55	*	0.03	7.08	4.14
Glendive	97	51	*	0.00	6.32	6.47
Great Falls	89	51	*	T	9.51#	5.45
Havre	92	52	90	0.01	8.78#	7.04
HELENA	88	54	81	0.04	9.53	5.00
Kalispell	86	48	90	T	4.37	5.61
Lewistown	90	46	*	0.10	11.81	6.52
Malta	94	53	*	0.02	9.22	6.46
Miles City	96	56	86	0.07	6.72	6.62
Missoula	96	52	88	0.04	7.22	3.54
Poplar	96	49	*	0.00	9.38	5.31
Stanford	*	*	*	0.03	12.26	6.58
Average				0.03	8.94	6.21

\*No Data

# Corrected to agree with July total.

The following summaries of crop conditions for the week ending July 30, 1938 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: Very little precipitation, some local showers. Haying started in wild hay districts. First crop of alfalfa in Beaverhead Valley up. Crops good with small amount of damage from hail to peas and grain. Some damage to peas from webworms. Majority of wool moved from local warehouse. Ranges good except in extreme high elevations. Webworms still doing some damage to pea crop.

BLAINE: General rain of approximately .50 inches occurred first of week. Balance of week clear; sunny days with normal temperatures. All wheat fields in northern part of county quite heavily infested with red rust. Rust has appeared in central part past few days, but only shows a trace. Wheat ripening quite fast past few days. Migratory grasshoppers making appearance in eastern part of county, but not in sufficient numbers to do any particular damage. Harvesting of feed crops started in many communities latter part of week. Crop conditions in general are very favorable. Livestock and range in excellent conditions.

CARBON: Higher temperatures prevailed most of week than preceding week. Heavy rains on 23rd, showers in western portion on Sunday. No hail reported. Harvesting small grains in full swing, and combining well under way in dryland sections. Heavy yields of grain, and considerable lodging has been experienced. Sugar beets making exceptional growth. Great Northern beans completely covering rows and will be ripened very shortly. Purple top of Bsyllid Yellows is becoming quite pronounced, on potatoes and tomatoes. Many garden varieties of beans grown in the field, particularly beautiful varieties, have blighted very severely. Corn and beans that were hailed are taking wonderful recovery. Transparent apples now being put on market from the orchards, and greater yield of raspberries is being secured by small fruit growers than at any time in the past. Livestock in the best of flesh.

CASCADE: No precipitation during past week. Total precipitation for July, .103 inch. Warm weather made excellent ripening conditions for winter wheat but caused some firing in spring wheat which will reduce yields considerably. Harvesting started on few early fields of winter wheat but no yield data available. Outlook is good for better than average yields on all wheat. Crops on irrigated land in excellent condition. Irrigation of sugar beets and potatoes about complete. Crickets under control. Program being concluded. No grasshopper damage. Webworms have completed their cycle and ceased working. Ranges in excellent condition with grass seeding abundantly. Livestock showing best fleshing in years.

CHOUTEAU: Ideal ripening weather for winter wheat, although slightly drying for late spring wheat in some areas. Harvest of winter wheat under way and will be fully under way next week. Spring wheat harvest about 10 days later. Winter wheat yields reported 40 bushels per acre in Shenkin and Big Sandy areas. These are not average stands however. Protein content from early samples reported running from 13 to over 14%. Some fields heavily lodged due to excessive rains, making harvest difficult. Mormon cricket control work continues. Blister beetles doing some damage to gardens. Sale of machinery extremely high as old worn-out machinery will not stand up under heavy straw to be harvested.

CUSTER - POWDER RIVER: Continued warm weather entire week with few light showers and rains reported in Powder River County. Harvest of dryland crops well under way. Spring wheat yielding up to 15 bushels where undamaged by grasshoppers. About 50% of dryland crops remained unharmed by insects. Second crop of alfalfa under irrigation now ready. Other crops making good growth except potatoes damaged by purple top. Wild hay harvest held up in some sections by recent showers and floods. Cattle and sheep continue to put on weight. Grass and water good.

DANIELS: Over .50 inches rain for part of week over most of county. Temperatures high entire week. Early seeded grains beginning to ripen. Rust doing considerable damage. Migration of grasshoppers into county heavy during week, resulting in considerable damage to crops. Livestock condition unchanged. Closing down WPA activities, during harvest season, will provide sufficient labor for farmers.

DAWSON: Rather general heavy rain covered most of county early in week, followed by clear hot weather. Grain cutting in full swing over practically all of county with feed grains practically all done and a start made on wheat. Binding, heading and windrowing is being done. Most of grain is still on green order for best results. Much of corn is withstanding the hopper attacks quite well. Livestock conditions remain good, excepting considerable sleeping sickness reported in horses. Hoppers in some areas clipping grassheads and range generally is rather heavily infested. Hornet situation is not greatly changed from a week ago. They are less concentrated in some areas, but a heavy infestation is general through entire area with considerable damage. Egg laying is in progress.

FALLON - CARTER: Growing conditions fair. .22 inch precipitation. Harvest under way. Fair to good corn crop expected at this time. Growing

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conditions for corn very good. Grasshoppers and rust reduced crop yield greatly. Large number of cases of sleeping sickness in horses throughout both counties. The disease has struck with extreme severity this last week. Mortality rate about 25%.

FERGUS: .25 inch rainfall over most of county with local showers in other parts.

Rain has helped spring wheat and stopped what burning there may have been during previous week, and has slowed up the ripening of winter wheat slightly. Most dryland alfalfa will make a reasonable second cutting and increase feed reserves considerably. Some binding started during week with combining expected to start between the 1st and 10th of August. Hail during week in Valentine section covering strip about 2 miles wide and 10 miles long. Livestock condition excellent, plenty of grass and water. Cricket crews have been taken off with control satisfactory in all areas. Grasshoppers doing almost no damage and few places where there are even enough to consider poisoning. Some feel that hoppers may move in from eastern part of county from migratory hoppers which have reached as far as Petroleum County from the east.

FLATHEAD: Cool weather prevailed throughout week. All crops maturing rapidly, with pea harvest nearly completed and binding and combining of winter wheat started. Much barley already harvested and other spring crops coming on rapidly. Quality of all grain will be good. Pastures getting shorter, but range providing ample feed for range livestock. Labor adequate.

GALLATIN: Cloudy fore part of week. Hail in west portion of county, damage slight. Few local showers of no benefit to moisture conditions. Grain cutting with binder now getting under way and wheat ripening so that combining will start in short time. Stacking of timothy hay completed. Canning pea harvest is in full swing with all viners running to capacity. Second cutting alfalfa started. Moisture content in summer fallow ground high enough to insure good germination. Fungus disease in grasshoppers occurring in three districts, but not to such an extent as to reduce need of poisoning.

GARFIELD - PETROLEUM: Showers covered both counties quite generally during the week with hail in north Petroleum County. Small amount of additional moisture will be valuable to pasture. Weather warm, partly cloudy, about average for season. Most crops excepting very late seedings are ripening. In some cases ripening has been hastened by grasshopper damage. Crops in many areas being harvested slightly prematurely to save some crop from continual grasshopper damage. Probably not over 50% will be harvested as threshed grain. Late seeded crops in many instances damaged beyond use for hay or harvesting in any manner, by grasshoppers. Livestock conditions continue very favorable with ample range grass for livestock within the area. Sleeping sickness continues with unprecedented severity in both counties. All available labor being used to rush harvesting operations. Grasshopper migration from east, reaching Garfield County on July 9th, has now progressed completely across the County. Only two days during the past week have been favorable for migration.

GLACIER: Good showers Saturday night and Sunday morning in northern part of county, about .5 inch precipitation. Temperatures generally warm with hot wind from southwest on Tuesday. Growing conditions generally good, some crops show damage from hot winds. Winter wheat ripening rapidly. Some early rye fields being harvested for grain. Flax and mustard past blooming. Crop conditions generally very good, for above normal. Sugar beet webworm infestation generally over, though some small areas still being bothered. Livestock in excellent shape; some wool being sold around 20¢, previous sales were 17¢. Adequate labor.

HILL: Precipitation .81 inch. Harvesting of rye, oats and barley started. Wheat harvest will start this coming week. Slight grasshopper and grain bug damage. Ranges in good condition. Livestock in good condition. Labor balanced.

JUDITH BASIN: Slight precipitation, temperatures variable. Winter wheat turning fast. In east portion of county, binders have started on fall wheat. Combining expected to start in week or ten days. West portion of county will be later. Much of wheat in western portion lodging badly. Yields expected to be good. Hot winds early part of week hastened ripening and probably will reduce yields somewhat. Grasshoppers doing some damage in scattered areas. Cricket infestation disappearing. Blister beetles doing considerable damage to potatoes and gardens. Webworms have disappeared. Livestock in excellent condition on range. Prospects are for an abundance of winter range. Shortage of experienced harvest labor.

LAKE: No precipitation. Generally clear and hot. Grain harvesting in full swing on all drylands. Second crop alfalfa and clover making excellent growth. Sugar beets gradually recovering from recent webworm attack. Peas being harvested. Livestock in good condition. Several carloads of lambs being shipped to market.

LEWIS & CLARK - BROADWATER: One light shower but week in general was rather warm and dry. Last Sunday unusually cool for July. Late

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crops being affected by dry weather, some. First crop of alfalfa all in stack and wild hay harvest in full swing with larger crop than usual. Winter wheat harvest will probably start this coming week. Sugar beets and potatoes making satisfactory progress. Webworms doing some damage to beets. In general webworm damage is decreasing. Feed becoming dry but there is abundance of grass for livestock.

MADISON - JEFFERSON: One or two light local showers during week. Growing conditions very good. Days very warm, nights cool. Harvesting of winter wheat and rye progressing rapidly with some spring grains also being harvested. Yields of winter wheat reported very good. First cutting alfalfa in stack with harvest of wild hay and meadow hays being rushed. Stock and range conditions continue very favorable.

MEAGHER: Very light showers past week. Weather quite cool. Some late grain beginning to look dry. Range beginning to cure. Moisture and temperature still very good for this period of season. Hay cured slowly past week. Most of winter rye harvested. Especially good grain yield indicated. Hay crop excellent. Livestock condition excellent. Several sales made to country buyers. Mixed lambs 7¢ (no straight ewe lambs offered for sale), steer calves 8¢, two-year-old steers 8¢. Labor demand a little ahead of supply on account of haying. Webworm infestation on decline with little damage done except to gardens and one field of alfalfa. Grasshopper damage beginning.

MISSOULA: Light showers first of week, with scattered streaks of hail. Moderate to seasonal temperatures. Growing conditions excellent. Some grains damaged from 50% to 100% by hail in southern part of county. Grains ripening and harvesting commenced. Second crop of hay harvest in full swing. Yields generally good. Sugar beet webworm infestation about disappeared. Ranges and pastures in good condition. Livestock in excellent condition. Labor situation about balanced.

MUSSELSHELL - GOLDEN VALLEY: Scattered local showers, weather quite cool. Crop conditions generally good. Crops damaged by hail are coming back and will make some crop. Harvest started. Most barley has been cut. Some oats being cut. A few ranchers scattered over the counties have started combining wheat. Few fields on which check was made, yielded 22 bushels per acre. In another week wheat combining will be in full swing. Livestock in good condition. Plenty of feed. Hay being cut on range land. Ranchers putting up every bit of hay they can with the help they have.

PARK: Varying weather conditions, with alternate hot and cool weather and local rains. Most first crop alfalfa stacked. Some badly damaged by wet weather. Timothy haying under way. Early winter wheat harvest beginning but most grain will not be cut for about two weeks. All crop prospects still excellent. Livestock in fine shape, due to abundant grass. Some contracting of lambs between 6 and 7 cents. Most of wool sold from 17¢ to 19¢. Labor balanced. Grasshopper damage more noticeable on grain and second crop alfalfa. Blister beetles and webworms damaging potatoes and gardens, but infestation spotted.

PHILLIPS: Light shower early part of week. Generally clear and warm. Ideal ripening conditions. With exception of small area in northeast part of county, crop conditions are very good. In balance of county there is sufficient moisture to bring crop through. Grasshopper infestation spotted throughout county. In most localities very little damage has been done, in some other areas damage is considerable may run from 10% to 25%. Harvesting of oats and barley in progress. Livestock condition good. Fewer reports of sleeping sickness in horses. Surplus of labor.

PRAIRIE: Weather hot and dry. Grain ripening rapidly. Combines started operating middle of week. Yields spotted and fields vary from 5 to 15 bushels of wheat per acre with a bushel weight from 60 to 62 pounds. Rust doing considerable damage to late wheat. Corn making good growth but needs rain. Grasshoppers taking their toll of crops, but have not started on corn yet. Livestock is in good condition and ranges are curing with considerable cover.

RICHLAND: Approximately one inch rainfall in eastern part of county for part of week with heavy showers reported in central portion. Grasshoppers continue to migrate into county from Dakotas and also continue to migrate out of county moving from field to field whenever conditions are ideal for flight. Northeast area of county which was not affected so hard on first migration has been more seriously hit during past week. Stem rust appearing last week and taking some toll particularly on later grains and in low spots. Harvesting of all crops in full swing, many being cut before maturity in order to stave off further damage from grasshoppers. No particular moving of livestock to market to date.

ROOSEVELT: Generally higher temperatures with some wind. No precipitation. Grain maturing rapidly with farmers making every effort to harvest as rapidly as possible. All spring wheat being either windrowed or bound. Practically all other grains aside from spring wheat harvested either for grain or hay to avoid grasshopper damage. Rust expected to cut yields and grade down materially in all

except earliest spring wheat. Grasshoppers have migrated some from county during week. Crop damage varies generally from 5% to practically complete loss in a few fields, with average loss from hoppers estimated at around 15% to 20% at present. Poisoned bait being used to some extent mainly to protect flax. Considerable native hay put up with most of bluejoint haying completed. In some instances hay has been cut on prairie. Scattered cases of encephalomyelitis occurring. Labor becoming more scarce.

ROSEBUD: Practically one inch rain, general overcast. July was fourth wettest on record. Harvesting delayed early part of week by rain. Oat crop practically all cut for hay because of grasshopper damage. Wheat in northern end of county about 50% destroyed. Farmers in general do not fear any serious damage to corn and other row crops. Hoppers thinning out in worst infested area, but reported showing up in areas not infested previously. Range continues to remain green. No cattle shipments made yet except few truck lots to Billings. Aging price for lambs advanced during week. Sleeping sickness general over county, much more widespread than in previous years.

SANDERS: Slight precipitation. Average maximum temperature, .71; average minimum .53. Generally clear and cooler temperatures; all dryland crops suffering from lack of moisture. Binding and combining winter wheat in full swing. Estimate 60% normal yield on account of early drought. Very good quality. Second cutting alfalfa being harvested. Spring grain ripening fast and poor condition on account of drought. Livestock doing well on higher range. High fire hazard in forest areas, a few small forest fires of small importance so far this season.

SHERIDAN: Showers, total precipitation .60 inch. Normal warm weather for season.

Weather conditions favorable for crop development. Rust continues to develop on most wheat in county. Migration of hoppers into county during past four days creating very serious threat to all crops. Estimated 20% damage has occurred up to present time, and it is probable that 50% damage will occur in many fields within very short time. Livestock conditions continue favorable. Numerous cases of encephalomyelitis have been reported from all parts of county. Due to rush in harvesting grain before too much hopper damage occurs, a sharp increase in demand for labor in harvest fields has taken place. Local supply of labor has been sufficient up to present time.

STILLWATER: High temperatures prevailed entire week. No hail reported. Crop conditions remain generally favorable with all grains ripening very fast. Considerable grain being cut with binders and combining started. Second crop alfalfa being put up. Potato crop looks poor at present time. Cricket control work finishing with good results. Grasshoppers thick in some areas but little poison being spread. Livestock in good condition, but as yet there is a light movement to market. No surplus of labor.

SWEETGRASS: Weather warm and cloudy. Showers and some hail. Precipitation 1.16 inches. Crop conditions good. Heavy grain lodging with rain and wind. Early fall grain being harvested, balance advancing rapidly. Considerable loss in hay crops due to rain. Livestock, especially cattle, doing well. Lambs having considerable difficulty with needle grass and worms in farm flocks. Labor situation unchanged. Crickets pretty well under control. Grasshoppers quite numerous and doing damage in spots..

TETON: Weather normal for season. High temperatures  $86^{\circ}$ ; .06 inch precipitation at Choteau but not general over county. Warm weather has ripened grain very rapidly in eastern half. First field of winter wheat harvested last of week with reported yield of 20 bushels per acre. Winter wheat harvesting will be quite general next week, in eastern half of county, somewhat later in northern part. Will be two weeks before spring wheat harvest begins in eastern portion, four or five weeks in Pendroy area. Warm dry weather has done considerable damage to late crops. Webworms have done considerable damage to late crops. Webworms have done considerable damage to flax and gardens, but are practically stopped at present time. New flight of moths in eastern edge of county. Some movement of grasshoppers from dried up pastures to late grain fields, and some hopper damage reported to second alfalfa crop. Haying general in western half, with wild hay crop a little better than normal. Livestock in excellent condition. Practically all wool moved out of county.

TOOLE: Good rains first of week varying from .43 to .88 in various parts of county. Weather warm, but will probably be considerable time before first harvesting is done. Wheat has not filled out as much as expected, two rows of kernels is average for county, although some fields show three. All cattle and sheep in excellent condition. Range still excellent. Hay hands using up most of surplus labor. Many of these men will be available for harvesting, but situation is much more acute than it has been and it is expected that it will become more so in the next few weeks.

VALLEY: Fore part of week cool and cloudy, latter part dry and hot. General rain

County Summaries of crop conditions for the week ending July 30, 1938 - Page 5.

over county on Monday. Growing conditions generally satisfactory. Sufficient moisture. Harvesting in southern part of county with binders in full swing in attempt to save oats and wheat from damage by grasshoppers. Considerable rust reported, however, damage cannot yet be determined. Several cases of sleeping sickness reported and some shortage of horses for mower and binder work. Grass generally good but being damaged somewhat by hoppers especially in some areas. Shortage of labor for harvesting operations. There was a general migration of hoppers into the county Friday, which extended to Canadian line. Serious damage reported in southern portion, however, damage is spotted, varying from practically none to 75%. Considerable damage by hoppers is anticipated unless general migration from the county occurs.

WHEATLAND: Continued hot weather with one good local shower middle of week.

General growing conditions good, although additional moisture is desirable in some parts of county. Crops in good condition generally over county. No large amount of damage reported due to grasshoppers.

WIBAUX: Precipitation at Wibaux .19 inch, in north end of county 1.65, Tuesday the 26th. Several hail losses reported north of Wibaux. Harvesting in full swing. Headers and binders used more than usual because of drouth, grasshoppers, rust, and hail injury. Windrowing also practiced to some extent. Yields will be very spotted. Quite a percentage of grain will be shrivelled because of cutting before it is ripe, to get away from hoppers and rust damage. Corn and late feed crops need rain in large portions of county. Livestock and ranges in good condition.

YELLOWSTONE: Precipitation .44 inch. Cool first of week, warmer last part with intermittent showers. Combining of winter wheat starting. Practically all wheat harvested by binder is in shock. Second cutting hay under way. Purple top disease still affecting all potatoes and tomatoes in the valley. Spraying continues with fairly good results if caught in time. Practically same condition on crickets prevailing this week. Not much damage being done, however. Livestock and labor situation same as last week.

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Helena, Montana  
August 2, 1938

UNITED STATES DEPARTMENT OF AGRICULTURE  
Bureau of Agricultural Economics — Weather Bureau.

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA  
For the Week Ending Tuesday, August 9, 1938.

*Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.*  
Offices: Federal Office Building, Helena, Montana.

Dryland grains deteriorated in Montana during the week ending August 9th, as a result of continued high temperatures and lack of rainfall. Showers and much cooler temperatures on the 9th, however, relieved the situation in a good part of the State east of the Divide, particularly in the southwestern, north-central, and extreme northeastern portions. Much of the dryland area has had no appreciable precipitation for the last four successive weeks and the ground is in a very dry condition. Late-sown grains in these areas, having developed heavy foliage and shallow root systems because of plentiful moisture during the first part of the growing season, are now in need of generous rainfall for carrying through to maturity. Irrigated crops continued good growth.

Until showers occurred on the 9th, weather conditions were ideal for ripening of grains and rapid progress of haying, harvesting, and threshing operations. Grain harvesting appears in all stages of progress, and has been completed already in many southeastern districts. Heavy yields of winter wheat have been reported from Big Horn, Carbon, Cascade, Chouteau, and Gallatin Counties. In Big Horn, the winter wheat harvest is regarded as the best in the history of the county. Below normal yields of winter wheat have been reported from Sanders and Flathead Counties. Spring wheat and other spring grain conditions have declined during the last three weeks, partly because of lack of rainfall in the dryland areas, and partly because of severe damage from rust and grasshoppers in the northeastern and east-central districts. Many fields, which have been severely damaged in the northeast, will be abandoned. Mustard is ready for harvest, and flax is past the blooming stage. Corn has been growing well, but is being damaged by grasshoppers in some eastern fields. Harvest of canning peas continues, and there has also been some harvest of seed peas. Beans are in good condition except for blight in Carbon County. The condition of potatoes varies from poor to good; many fields in southern and eastern districts are affected with the "purple top" disease.

Haying continued in full swing in the wild hay districts and where the second crop of alfalfa was ready for cutting. Showers interrupted operations, however, at the very close of the week. The second crop of alfalfa has been of better quality because of deterioration and spoilage of the first crop by rain and other unfavorable weather conditions. Seed alfalfa prospects are reported only fair in Rosebud County. Prairie grasses have cured with heavy seed set. Considerable danger from fire exists while the grass is dry because of the abundant cover. Continued dry weather has necessitated irrigation of pastures.

Cattle and sheep are reported in fine condition. There has been no marketing activity except for the shipment of fat lambs from Sanders and Lake Counties. Spread of sleeping sickness and loss of horses continues. Paralysis is reported among poultry flocks in Pondera County. Cricket control work is tapering off, or has ceased. Control measures for the most part have been quite successful.

TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING AUGUST 9, 1938

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Conrad	*	*	*	0.22	9.22#	7.74
Cut Bank	82	43	*	0.03	9.71	6.50
Fort Peck	91	54	*	0.03	7.11	4.19
Glendive	100	48	*	0.30	6.62	6.49
Great Falls	89	46	*	0.85	10.36	5.49
Havre	90	46	92	0.54	9.32	7.04
HELENA	85	50	93	0.44	9.97	5.14
Kalispell	86	42	90	0.00	4.32#	5.78
Lewistown	86	38	*	0.22	12.03	6.56
Malta	88	48	*	0.03	9.25	6.46
Miles City	98	54	94	0.11	6.83	6.62
Missoula	88	46	88	0.16	7.38	3.67
Ponchar	98	48	*	0.21	9.59	5.31
Stanford	*	*	*	0.25	13.37#	6.59
Average				0.23	9.21	6.25

#Corrected to agree with July total. \*No Data.

The following summaries of crop conditions for the week ending August 6, 1938 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: No precipitation, hot and dry, nights cool. Haying in full swing in wild hay districts. Crops good. Some damage to pea crop by sugar beet webworms. Livestock in good condition.

BIG HORN: Warmest season of year prevailed, no precipitation. Crops doing well. Winter wheat being combined generally, with reports on yields as high as 55 bushels per acre, best winter wheat crop in history of the county. Spring wheat ripening rapidly with yield prospect also good. First general irrigation of year took place during week. Beet crop making fine progress, corn also growing rapidly. Potatoes badly affected with purple top. Second crop alfalfa hay being put up in much better shape than first crop. Range grass ripening. Cattle in fine condition. Big demand for livestock in view of abundance of feed available. Ample labor. Not much insect damage reported. Cricket control work gradually tapering off.

BLAINE: No precipitation, clear sunny days, normal temperatures. Dryland wheat crop in northern part of county has deteriorated very rapidly during week. Estimated reduction in yields approximately 30% of what it was a week ago, due partly to rust out more largely to dry weather. Apparently weather and moisture conditions were such that wheat plants developed shallow root systems, and when dry weather hit the large amount of forage on the fields sapped moisture very rapidly from the surface. Few samples of wheat harvested in Turner vicinity running approximately 10 to 12 bushels of No. 4 wheat. Crops south of Milk River ripening very fast but not as much deterioration as in north part of county. Beets and potatoes in Milk River Valley made rapid progress. Wheat in valley heavily infested with rust which has greatly reduced yields. Livestock and ranges in excellent condition.

CARBON: Hot and dry, with little rain reported during week. Temperatures range well up to 90 odd degrees. Haying in full swing in timothy and red top meadow regions west of Roberts and Red Lodge. Extra good quality reported. Cutting of grain well along with some 60 bushel yields reported in dryland sections. Major part of grain cutting completed in Clarks Fork Valley. Beans formerly haled out making wonderful recovery. In many cases, field crops of garden beans, as well as most beans in town and country gardens are badly blighted. Purple top condition in potatoes reported very bad over entire county. Spraying with lime sulphur being carried on. Grasshopper baiting practically at standstill. Many combines in operation in dryland sections. Weed spraying started by private individuals. Livestock in excellent condition.

CASCADE: No precipitation. Warm weather is ideal for maturing wheat crops. Harvesting of winter wheat well under way. Yields as high as 45 to 48 bushels reported. Range grass maturing with heavy seed set. No damage from insects. Livestock in excellent condition. Labor situation normal.

CHOUTEAU: Scattered light showers over county, continues warm, speeding ripening of wheat crops. Harvesting of crops in winter wheat area fully under way. Reported yields fair, but none exceptionally high; 20 to 40 bushels reported. Spring wheat harvest under way in scattered areas but no reliable reports on yields as yet. Mormon cricket control program still under way with tin barrier proving effective especially in Square Butte area.

CUSTER - POWDER RIVER: Temperatures varying, no rain. Dryland wheat making 7 to 15 bushels per acre. Second cutting alfalfa going in stack. Irrigated crops continue good growth except potatoes affected by purple top. Control measures started Saturday. Wild hay harvest still in progress. Grasshoppers doing some damage to grass in certain areas. Condition of stock remains good. Timber and grass fire started in Pine Hills East of Miles City by burning coal mine menacing large area of range land. CCC crew aiding local ranchers in control. Several hundred acres burned and fire not yet checked by Saturday noon.

DANIELS: No precipitation. Temperatures high most of week. Estimated that approximately 40% of crops have been badly damaged by rust and another 20% from grasshoppers during past ten days. First reported wheat combined averaging from 10 to 14 bushels per acre. Considerable migration of grasshoppers. A few more cases of encephalomyelitis in horses reported. Surplus of labor in county due to sudden change in crop conditions.

DAWSON: Weather seasonal. Grain cutting continues full swing but with little threshing started. Few combines are in fields but runs have been too short to determine yields. Hopper and rust damage continues to mount with corn now being attacked which previously had not been hurt. Quite a little wild hay being cut in scattered areas over county. Livestock conditions generally remain favorable although flies and insects are bothering to considerable extent. Water ample and grass conditions favorable. Sleeping sickness continues to take its toll among horses. Hopper attacks are less severe than previously although they are scattered over entire county and damage continues. Egg laying in progress over

(Cont'd on Page 2.)

much of the area.

FALON - CARTER: Precipitation .12. Hot weather with high winds a portion of week. Hot and dry in central Carter County. Farmers busy in fields, harvest about half completed. Showers of rain would help corn. Livestock in general in good condition. Plenty of feed and water. Additional sleeping sickness cases in horses reported in various parts of counties.

FERGUS: Light shower first of week. Hot and dry rest of week. Combining started in west part of county. Binding started in other parts. Spring wheat continues with good growth. Livestock continues good. Grasshoppers doing very little damage. Still some fear of migratory hoppers coming in from East.

FLATHEAD: Dry with warm days and cool night. Ideal weather for harvesting. Combining and binding of winter wheat in full swing, with some spring wheat ready for harvest. Yields of winter wheat running much better than expected. Most reports from 16 to 32 bushels with lower than average yields from only on community. Quality of winter wheat is excellent. Spring wheat crop in northern part of valley is showing prospects for best yield in years. Present prices will result in much wheat going into storage on farms and in elevators. Second cutting alfalfa hay and potato crops are in better condition than at this time last year. Pastures short. Range livestock in good condition.

GALATIN: Weather clear, dry, wind fore part of week. Increased average temperatures. Grain harvest with binders in full swing, with indications that large acreage will be handled with binders. Combining started during week and winter wheat practically all ready to harvest. Yields high and in accordance with expectations in all areas except those damaged by hail in July. Final operation being done on summer fallow, which shows good moisture content. Flow in Gallatin River decreasing but still apparently sufficient water to continue irrigation of hay and pasture and some late grain. Canning pea harvest continues and few fields of seed peas being harvested. Pastures and range still in excellent condition.

GARFIELD - PETROLEUM: Trace of precipitation. Dry hot winds have prevailed. Crops continue to mature rapidly. Haying operations continue in full swing in attempt to salvage at least some hay. Serious damage from grasshoppers in Garfield County, most fields being cut from 50 to 75%. Most operators will market small percent of cash grain expected. Gardens are almost total loss. Alfalfa seriously injured and very little seed is likely to be harvested. Livestock continue in favorable condition with ample grass for stock in the area. Sleeping sickness continues severe which seems to offer resulting shortage of horses in some areas. Some migration of hoppers from East to West during week, the horde reaching into eastern Petroleum County. Worst concentration seems to be in area of Musselshell River. Even the numbers have been thinned out considerably in Garfield County, there still remains sufficient infestation to cause continued damage.

GLACIER: No rains past week. General growing conditions fair to poor. Hot fore part of week, did some damage. Winter wheat harvest commenced with yields of around 20 bushels. Some early spring wheat will be harvested in about a week or ten days. Early spring grains showing some damage from winds and insects, and native hoppers have drifted into fields from pastures and range. Crop conditions generally good. Mustard and flax generally past blooming. Mustard beginning to turn with indications of fair harvest. Second crop of alfalfa almost ready to cut. Native hay yields high. Lots of hay being put up. Loss on wheat this week estimated at 10%. Livestock generally in good shape.

HILL: Precipitation .01 inch. Oats and barley harvesting under way. Harvesting of wheat just started, will be under way generally throughout county next week. Ranges in good condition. Livestock in good condition. Labor balanced.

JUDITH BASIN: No precipitation. Considerable winds and drying weather. Temperatures high. Most of wheat now turning. Binding started in East end of county. Combining will start within a week on winter wheat. Spring grains will be somewhat later. Grasshoppers increased in numbers and all sizes appear to be present. Very little damage is reported and very little poison being spread. Cricket control crew ceased operations, completing their season's work with practically 100% effective crop protection campaign. Livestock in good shape. Marketing has not started. Range condition excellent. Sleeping sickness in horses reported on large number of farms and some losses have occurred. Farm labor shortage being taken care of by influx of transient labor.

LAKE: Hot and dry with some wind, no precipitation. Grain harvesting in full swing with yields slightly higher than normal. Second crop alfalfa being harvested. Lambs being shipped to market at  $6\frac{1}{2}$ ¢ per lb. Cricket poisoning completed.

LEWIS & CLARK - BROADWATER: Warm weather favorable for later maturing crops.

Harvesting of winter wheat off to a good start. Yield information has not come in but it is expected will be substantially higher than for several years. Other crops progressing satisfactorily. Considerably more hay being put up than usual. Ranges drying considerably but grass plentiful and stock are holding and improving gains in weight. Insect damage at minimum with small amount of damage being done.

MADISON - JEFFERSON: Temperature varied from very hot to cool days with cool nights. Strong hot winds Monday and Thursday. No precipitation. Crop conditions remained very good, with harvesting of winter wheat and rye and some spring grains making rapid progress. Harvest of early potatoes starting. Wild hay being put in stack as rapidly as possible so as to have it out of the way by the time the second crop of alfalfa is ready. Little damage now being done by insects. Sheep and cattle still in exceptionally good condition with abundance of feed and water on ranges.

MEAGHER: No precipitation. Temperature moderate with close approach to frost Tuesday morning. Harvest proceeding satisfactorily throughout week. Threshing winter rye just beginning. Some spring grain beginning to burn. Range curing at lower altitudes. All yields will be much better than in any recent year. Condition of livestock continues excellent although flies bothering. No new reports on sales. Labor demand ahead of supply during harvest. No important insect damage as yet. Webworms declined rapidly during week. Blister beetles doing some damage to gardens. Grasshoppers not doing any definite damage so far.

MISSOULA: Warm and dry, no precipitation. Excellent harvest weather. All small grains ripening and harvest in all stages of progress. Threshing started in some localities and will be general throughout county next week. Yields fair to good. Second crop alfalfa and timothy and clover haying still in progress. Sugar beets making some recovery from webworm damage. Ranges and pastures in fair to good condition.

MUSSELSHELL - GOLDEN VALLEY: No rain, hot, warm winds. Grain ripening very fast. Harvest in full swing. No definite check on yields. Some early wheat went 20 bushels per acre. Livestock in very good condition. Sleeping sickness among horses will decrease horse population in both counties by at least 15%.

PARK: Warm, dry weather, maturing crops. Winter wheat harvest under way with binders. Second crop alfalfa coming good where grasshopper infestation is not too heavy. All grain yields expected to be good. Livestock in excellent condition. Very little movement to market yet. Labor balanced. Some grasshopper poisoning being done in worst infested sections.

PHILLIPS: Very light local showers mid-week. Warm days, cool nights. Ideal ripening condition. Early crops not severely affected by red rust but heavy losses anticipated in late crops. Oats, barley and early wheat being harvested by binders. Combining expected to start next week. No report on yields. Grasshoppers doing considerable damage in eastern part of county and other scattered localities. Grasshopper poison moving more freely. Livestock condition good. Range good. Sleeping sickness in horses still reported from all parts of county. Labor balanced.

PCNDER: Hot, dry and windy. Wheat has turned rapidly, filling 2 and 3 to the mesh. No particular damage experienced from grasshoppers, although they are moving in from fence lines into fields. Harvest began on rye, although acreage is very small. Some are binding barley, and expect to bind oats latter part of next week. Expect harvesting of feed crops to be in full swing next week. Oats and barley extremely heavy seed. Approximately 265 cases of sleeping sickness reported. Epidemic is county-wide.

PRairie: Hot and dry, no precipitation. Late crops ripening too rapidly due to rust and hot weather. Grasshoppers continually taking their toll. Wheat combined on south side of Yellowstone River will probably average around 7 bushels per acre. North of Yellowstone crops are damaged more by hoppers and by rust, as crops are about two weeks later. Range grasses curing rapidly. Considerable amount of wild hay being cut in coulees. Livestock holding its own with flies bad. Sleeping sickness working among horses.

RICHLAND: No precipitation. Rather cool weather with considerable wind one or two days. Harvest of small grains in full swing. Reports so far are that crops are running extremely low with many reports of around 4 to 6 bushels, some of these farmers had expected to receive 20 to 25 bushels until the hopper migration. Estimated that grasshoppers have destroyed around 65% of wheat with greater toll on other crops. Large portion of fields have been cut with binder and header, ordinarily they would have been combined. Stem rust has also caused considerable loss to many fields particularly later sown fields. On some fields rust has caused more damage than hoppers, but generally speaking, it is the reverse. Livestock in good condition, expected that plenty of feed will be had to keep them in shape. All surplus labor absorbed in harvest fields. Some purple

top showing up in potato fields and expected that some spraying will be done.

ROOSEVELT: Fair and warm, generally favorable for harvest with exception of two windy days. Spring wheat harvest in full swing with combines starting past week. Early combined wheat averaging 58 lbs. per bushel with fields yielding generally from 5 to 18 bushels depending on extent of hopper damage. Rust damage severe in later fields particularly in east and central sections of county. As harvest continues, grade and yield expected to drop. Some fields being abandoned because of hopper and rust damage. In eastern section where grain was mainly bound about 60% of spring wheat has been cut. Corn and other feed crops in good condition except for few corn fields which have been damaged by having silks destroyed by hoppers. Exceptionally large yields of millet reported. Livestock situation unchanged. At present grasshopper infestation spotted as considerable numbers have moved on. In some sections enough remain to continue damage to gardens and crops.

ROSEBUD: Weather most of week ideal for harvesting. Few local showers brought limited moisture to few areas. Winter wheat either all combined or in the shock. Spring wheat harvest getting under way. Second crop alfalfa being cut. Prospects only fair for alfalfa seed crop. Grasshopper infestations still spreading to new areas. Damage not severe except in northern part of county and in alfalfa fields being saved for seed. Purple top causing some damage to potatoes. Abundance of feed being put up in all parts of county. Little activity in cattle and sheep sales during week.

SANDERS: No precipitation, cooler temperatures. Growing conditions poor due to lack of moisture. Winter wheat harvest well under way with yield somewhat below normal, but very good quality. Spring grain being cut with low yield from lack of soil moisture. Second cutting hay mostly in stack with about 70% normal yield. Potatoes making poor growth with outlook of low yield unless rain comes very soon. Livestock doing well on higher range. Marketing of fat lambs starting.

SHFRIDAN: Light showers in parts of county. Warm weather caused grain fields to ripen rapidly. Grasshoppers which have migrated into county have caused damage amounting to between 20 and 30% in all parts of county. Damage in some areas is as high as 90%. Damage to late wheat from rust very apparent. Undoubtedly many fields will not be harvested because of damage by rust and grasshoppers. Fields which have been harvested are producing yield of 8 to 20 bushels per acre, weights of 55 to 62 lbs. per bushel have been reported. Later threshing will very probably produce much lighter weight wheat with smaller yields per acre. Livestock conditions continue favorable. Demand for farm labor continues. Local supply still sufficient to take care of demand.

STILLWATER: Week characterized by hot weather, no rain. Harvest of grain crops in full swing, yields reported from 25 to 40 bushels. Fields ripening very fast. Second cutting alfalfa being started. Potato yields will be materially reduced due to purple top. Sugar beets in Park City area do not look too good. Cricket control work for year has been completed. Grasshoppers doing damage in some areas, but little poisoning being done. Livestock of all kinds in good condition, with little movement as yet to market. Few offers on lambs to date. No surplus of labor.

SWEETGRASS: Warm and dry, cool nights. Frost reported in hills. No precipitation. Good week for haying and harvesting grain. Haying continues. Winter and early spring crops being harvested. Late grains advancing rapidly. Livestock gaining in weight. 25% of lambs contracted. Few early cattle sales. Labor situation unchanged. Insect situation unchanged.

TETON: Continued dry weather has hastened harvesting, also caused further depreciation of spring wheat crop by 10%. Spring wheat harvest getting started in eastern part of county. Winter wheat harvest about 30% completed with yields running from 15 to 35 bushels per acre. Indications are that spring wheat will probably run a little lighter per bushel this year in some areas. Wild haying about 25% completed, with better than normal crop. Livestock continue in excellent condition. Sleeping sickness in horses more prevalent than any time in past with 30 cases reported at present time.

TOOLE: Hot and dry. Early seeded spring wheat, and winter wheat, in fairly good shape. Late seeded crops damaged considerably by hot weather and it is thought that damage would be at least 30%. All livestock in excellent shape. Stockmen still putting up hay and there will be more feed in the county than any year for past ten years. Farmers experiencing difficulty in getting men who are experienced.

VALLEY: Past week warm to hot, calm and clear mostly. Hoppers still coming into county, particularly in northern end. Reports of considerable damage

County Summaries of crop conditions for the week ending August 6, 1938 - Page 5.

being done, also reports of damage by rust in northern half of county. Harvesting getting well under way. Wheat running from 4 to 20 bushels. Few fields abandoned due to hoppers and some hail. Wheat weighing from 38 to 61 lbs. Beets look good; bluejoint haying nearing completion. Number of cases of losses of horses from sleeping sickness being reported.

WHEATLAND: Weather conditions hot, no rain. Growing conditions generally good.

Harvesting of winter wheat reported to have started in some parts of county. No crop damage reported due to grasshoppers. Quite a number of farmers and ranchers report sleeping sickness among horses with quite a loss already and many more having the sickness.

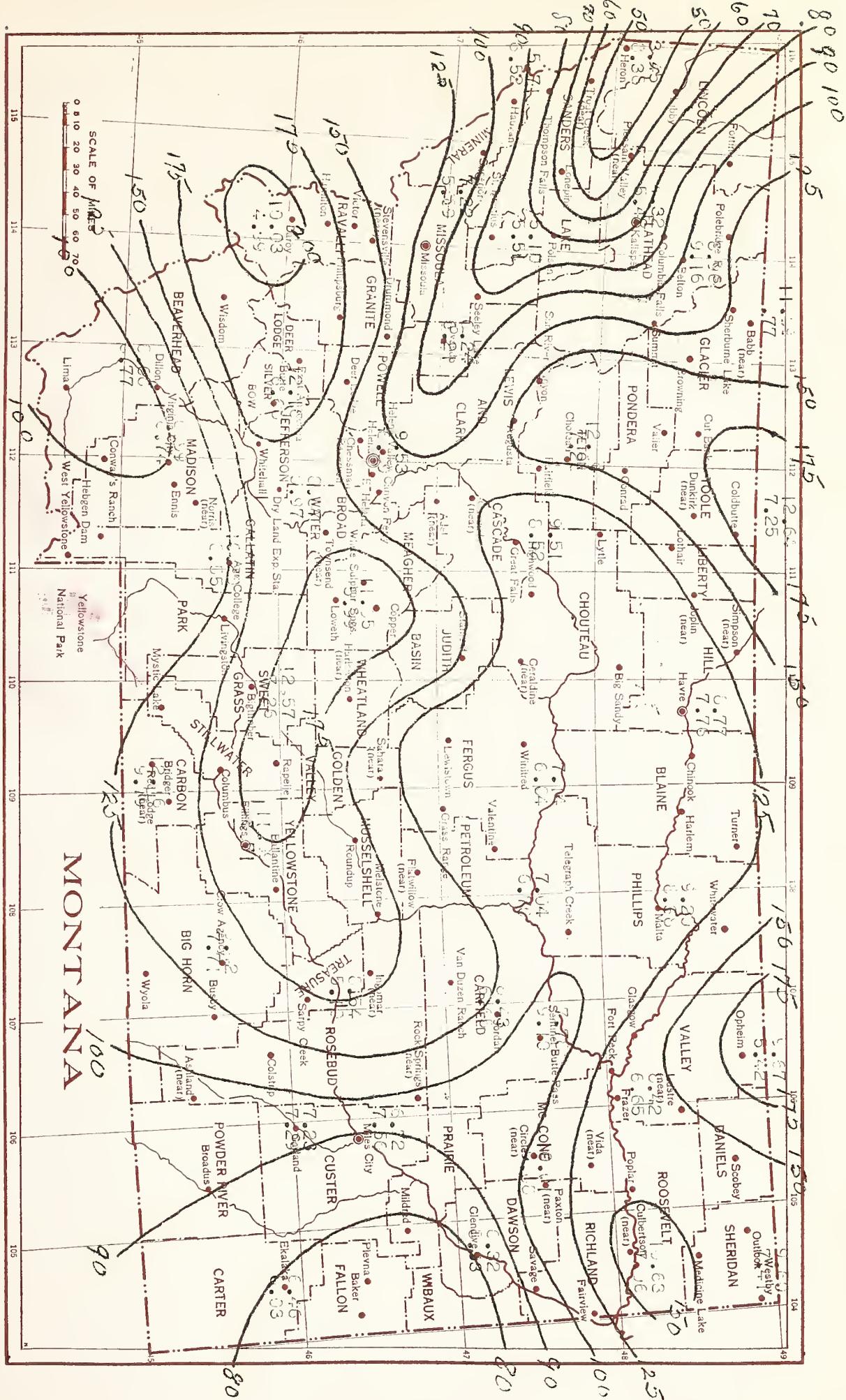
WIBAUX: No precipitation. Weather hot. Harvesting in full swing. Some operators have completed harvesting. Combining has started, threshing will commence next week. Yields so far reported have been from 5 to 11 bushels of No. 1 wheat. Grasshopper damage going to be larger than anticipated. A high wind August 2nd blew down a large number of heads of wheat, due to grasshopper injury. Grasshoppers beginning to damage corn seriously. Some hopper damage on ranges also reported. Livestock in good condition.

YELLOWSTONE: Trace of moisture. Clear hot days with cool nights. Second cutting hay put up and harvesting of grain crops in full swing. Dryland farmers on south side report yields of from 25 to 50 bushels of wheat per acre. Corn and beans in excellent shape. Purple top still very serious in potatoes and quite a few fields have been given their second spraying this week. Crickets still very bad on Lockwood Flats and other parts of south side. Tin barrier and oil still being used very effectively. Livestock in good condition. Surplus of labor.

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T. J. Kuzelka, Jr. Agr. Statistician. Jay G. Diamond, Sr. Agr. Statistician.

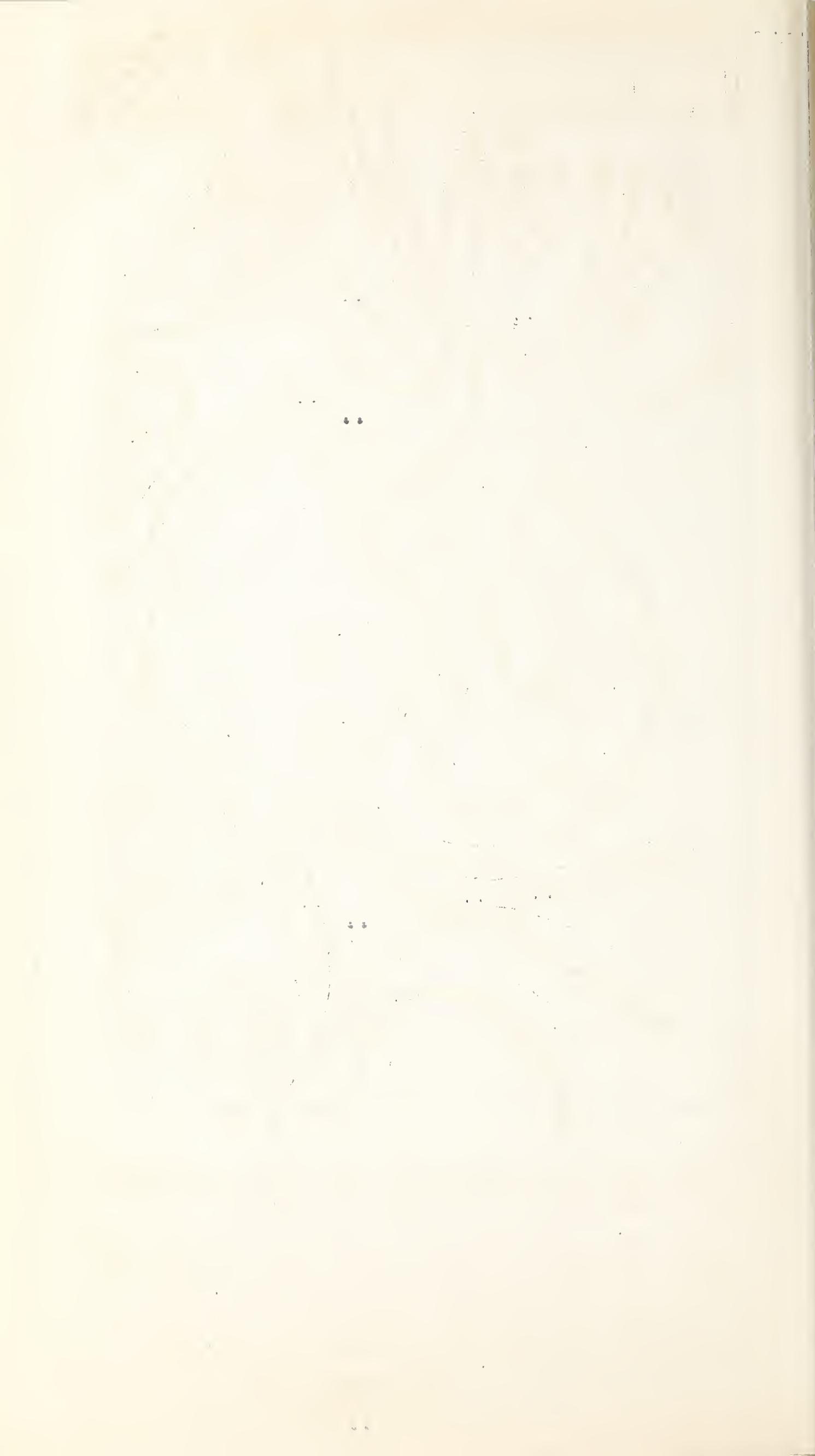
Helena, Montana  
August 10, 1938



This map shows the percentage of normal precipitation that has occurred in Montana during the first four months, April to July, inclusive, of the 1938 crop growing season.

The upper of each typed pair of figures indicates the actual amount of precipitation that occurred in that respective area during the period April to July; the lower figure of the pair indicates the normal precipitation for the same period.

Percentage lines are drawn for each 10 per cent up to 100 per cent, and for each additional 25 per cent above 100.



REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA  
For the Week Ending Tuesday, August 16, 1938.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau  
Offices: Federal Office Building, Helena, Montana.

Mixed weather conditions prevailed during the week. The average temperature was below normal, as the extremely warm conditions during the first half of the week when highest temperatures of the season occurred, were more than offset by the unusually cool weather that followed during the last half. Temperatures of 100°, or higher, were recorded at Glendive and Miles City on the 11th and 12th, as compared with maximum readings of only 72° at these stations on the 15th. Light to heavy showers occurred generally, and resulted in the greatest weekly average precipitation since the week ending July 5th. Heaviest rainfall was reported from the eastern third of the State, where amounts ranged from 1/2 up to 1 1/4 inches.

Showers slowed up haying, harvesting, and threshing operations, but improved soil conditions for fall plowing and seeding, and benefited late growing wheat and feed crops, corn, gardens, and alfalfa. Wild haying and harvesting of winter grains is well advanced to having been finished, while cutting of the second crop of alfalfa and harvesting of spring wheat and other late spring grain, which has been maturing rapidly of late, varies from barely started in some of the late areas to going into full swing in others.

Early threshed grain has produced varying yields. Winter wheat has been mostly of good yield and quality. Spring wheat and other spring grain yield and grade have declined as harvest progressed, particularly in the northeastern districts as a result of rust and grasshopper damage and forced early cutting. Irrigated crops have yielded well, although reduced to some extent in the grasshopper and rust districts. Stock water and irrigation supplies have held up well, except for some shortage of the latter in Gallatin and Sanders Counties. Sugar beets have made considerable recovery from webworm damage and most of the crop is reported in an excellent condition. Potatoes are poor in the southern districts because of blight. Some spraying has been done to protect the crop, but many fields will not make more than a third of a crop. Frosts on the 8th caused damage to tender garden stuff and about 25% loss of potatoes in northern Flathead County. Picking of early varieties of apples is underway in Carbon County.

Pastures continued short in some extreme western counties, but ranges remained good generally with grass mostly cured and adequate for fall and winter feeding needs. Showers were helpful generally. Grasshoppers are damaging seed alfalfa fields in the east as well as gardens and corn. Corn has been making good progress of late, but it has been necessary to cut some before ears formed to avoid further loss by grasshoppers. Sheep and cattle continue in fine condition, although a little thinning has occurred in some districts because of insect annoyance. Sleeping sickness among horses, while more widespread than at any time this year, as well as in recent years, is reported declining in Dawson County. Contracting of lambs continues with some counties reported contracted up to 50 percent.

TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING AUGUST 16, 1938

Station	Temperature Highest	Temperature Lowest	% of Possible	This Week	Total Precipitation	
					From April 1st to date	For Corresponding Period in 1937
Billings	97	45	*	0.64	12.63	6.95
Bozeman	90	41	*	0.25	10.58	9.50
Conrad	*	*	*	0.13	9.35	7.77
Cut Bank	91	44	*	0.32	10.03	6.51
Fort Peck	96	49	*	0.86	7.97	4.33
Glendive	102	46	*	1.24	7.86	6.49
Great Falls	92	42	*	0.40	10.76	5.49
Havre	94	52	62	0.56	9.88	7.07
HELENA	93	49	54	0.56	10.53	5.16
Kalispell	86	44	68	0.39	4.71	5.89
Lewistown	92	40	*	0.33	12.36	6.66
Malta	97	46	*	0.09	9.34	6.60
Miles City	100	50	76	0.59	7.42	6.62
Missoula	92	46	68	0.21	7.59	3.68
Poplar	98	46	*	0.75	10.34	5.33
Stanford	*	*	*	0.25	13.62	6.84
AVERAGE				0.47	9.69	6.31

\*No Data.



The following summaries of crop conditions for the week ending August 13, 1938 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: No precipitation, hot and dry. Rains needed. Still haying in wild hay districts. Crops in good condition.

BIG HORN: Combining of winter wheat general, spring wheat ripening rapidly. Valley crops, doing very well, beets especially making good progress. Corn also forging ahead after a late start. Potatoes badly affected with purple top. Second crop of alfalfa nearly up. Range grass ripening and seeding of depleted acres taking place. Livestock in splendid shape. Cricket control being carried out to protect late crops and alfalfa seed crops.

BLAINE: One good shower in central part of County Monday night. Harvesting of wheat started in all communities. Reported that wheat in southern part of county is running approximately 30 to 40 bushels per acre of No. 1 wheat. Sugar beets and potatoes still making satisfactory progress. Livestock and range in excellent condition.

CARBON: Light showers over entire county. Cutting of grain in full swing, many fields in dry lands being combined with yields of 40 bushels reported. Second cutting alfalfa put up in many sections. Apple picking of early varieties in progress. Bean crop beginning to ripen with first harvest in ten days to two weeks. Purple Top on potatoes has affected greater number of fields in county, and it is thought the crop will be very short. Tomato crop also affected by purple top. Threshing of small grains under way. Livestock conditions excellent. Encephalomyelitis being reported in various sections, with some losses.

CASCADE: Precipitation delayed harvesting. Winter wheat yielding 15 to 45 bushels. Spring wheat harvest just starting, yields disappointing. Livestock conditions good. No insect damage.

CUSTER - POWDER RIVER: Grain crop harvest practically over, both on irrigated and dry land. Yields reported better than average. Second cutting alfalfa in stack. Alfalfa left for seed showing good set but damaged some by grasshoppers. Stacking of wild hay continues where flooded earlier in season with yields close to a ton per acre. Spraying of potatoes affected with purple top about complete. Sugar beets and other irrigated crops good. Water supply from Tongue River ample. Range stock gaining although grass is dry. Water still sufficient. Sleeping sickness in horses reported in most localities with occasional losses.

DANIELS: Approximately .15 inch precipitation in some parts of county. Slight hail damage reported in some sections. Harvesting of small grains well under way. Large percentage of grain being harvested will be light due to rust. Livestock conditions remain good.

DAWSON: Showers and hottest temperatures of year alternated during week. Over 100° maximum. Cutting of grain continues, some combines running. Yields about 5 bushels. Corn continues to look good, but hopper damage to grain evident. No change in livestock conditions. Sleeping sickness apparently slackened. Flies bad. Range good, but hoppers cutting considerable grass. Hopper situation continues unchanged.

FALON - CARTER: Precipitation .03 inch. Another week will see most of grain harvest complete in Fallon County. Yields reported indicate that rust and hoppers have caused serious damage. Many fields of spring wheat grading very light in test weight. Livestock generally in good condition. Sleeping sickness in horses being reported daily.

FFRGUS: Hot, dry weather. Binders have been in field for last week. Combining starting in most sections and will be in full swing within a week. Yields per acre varying quite widely in few scattered reports of yields from 10 to 40 bushels of winter wheat. Too few fields finished to know what general average might be. Some shriveling may have been caused to late spring wheat by hot weather, but weather has been generally beneficial to wheat as a whole as it helped cut down moisture and speed up combining. Considerable interest in wheat loans, and crop insurance. Grasshoppers have moved into northeastern corner of county, in Roy and Valentine section. Little probability of crop damage as over half of grain is in shock, balance will be combined during coming week.

FLAHEAD: Warm days, cool nights. Frost Monday night killed most tender garden crops in northern half of county, damaged potatoes about 25%. Harvest of small grains in full swing. Crop yields characterized by no extremely low yields, due largely to local showers where yields in other years have been lowest. Pastures short, milk production dropping off very markedly. Range livestock in good condition.

GALLATIN: Cooler, partly cloudy. One or two local showers delayed harvesting.

Grain harvest continues at top speed, binders for spring grain and combines for fall grain. Seed pea harvest well under way, as well as canning pea harvest. Irrigation water from Gallatin River now reduced to extent that three of larger later water rights have been shut off.

GARFIELD - PETROLEUM: Trace of precipitation. Harvesting in full swing and large percent of wheat has been cut with mowers, binders or headers. Some yields reported from 3 to 20 bushels. Main horde of grasshoppers are reported in Winnett area. Damage in Petroleum County undetermined. Garfield County at least 50% on small grains with exception of Blackfoot area where binding was done before the migration. Gardens and alfalfa seed practically a total loss. Hoppers continue to do some damage to corn and late wheat not harvested. Livestock in good condition but range drying fast. Continued reports of sleeping sickness, with some loss occurring.

GLACIER: No precipitation. Warm and windy most of week. Grain ripening fast.

Few starting to harvest spring wheat. Winter wheat mostly harvested in eastern part of county. Few reports of grasshoppers, very little damage. Livestock in excellent shape.

HILL: Precipitation .73 inches, warm and dry most of week. Several combines started work, some yields completed. Yields on summer fallow 18 to 25 bushels, weight 52 to 62, mostly over 58. Protein mostly from 14 to 16, although range of 11 to 17.50. Farmers paying strict attention to getting crop harvested. Ranges good, lots of ergot in wheatgrass. Livestock in excellent condition.

JUDITH BASIN: Precipitation light and scattered. Temperature moderate to high. Harvesting getting in full swing with winter wheat going from 15 to 40 bushels. All crops ripening rapidly. All types of harvesting implements being used. Haying still in progress. Cricket campaign closed. Grasshoppers doing some damage, but not noticeable. Livestock in good shape on range; lots of feed in prospect for winter. Shortage of stock cattle, sheep, and hogs.

LAKE: No precipitation. Weather seasonable. Grain and hay harvest in full swing.

Hay yields somewhat below normal. Potato and sugar beets making satisfactory growth. Sufficient irrigation water available for maturing crops under ditch. Grasshoppers and crickets laying eggs. No damage being done to crops.

LEWIS & CLARK - BROADWATER: Almost one inch of precipitation. Warmest weather of summer middle of week, tapering off to cool at end of week. Harvesting of winter wheat generally good with only short delays on account of moisture. Protein seems to be less than past few years but yields considerably higher. Second crop alfalfa being harvested on irrigated lands. Sugar beets progressing satisfactorily with limited amount of sugar beet webworm damage. Some cases of sleeping sickness in horses. Some vaccinating for this disease being done.

MADISON - JEFFERSON: Showers Wednesday, heavier in southern part of county. Growing conditions good. Hot most of week. Better crops than usual in both Madison and Jefferson Counties. Harvesting winter wheat and peas. Spring wheat coming in good shape. Considerable hay in stack and more being put up. Livestock in good condition. Abundance of good grass. Little damage from insects.

MEAGHER: One excellent rain. Temperatures a little higher, not extreme. Harvesting progressing satisfactorily. Some small grain burning on dry land. Average yields remain more promising than previous years. Livestock conditions excellent. Country buying negative. Many cases of sleeping sickness in horses reported. Very little insect damage during week.

MISSOULA: Warm and bright first of week, cloudy and cool last part. Harvesting of small grains in full swing. Yields fair to good. Threshing starting. Second crop alfalfa still being cut. Sugar beets recovering from webworm damage and making good growth. Potatoes growing well. Good crop is in prospect. Ranges and pastures in good condition.

MUSSELHELL - GOLDEN VALLEY: No precipitation; high temperatures, hot winds. Harvest in full swing. Winter wheat yields reported very good. Livestock in good condition. Sleeping sickness still taking serious toll among horses. Ranchers trying every possible way to save as many as possible.

PARK: Warm. Hot drying winds fast ripening grain. Spring wheat and barley harvest under way. Some second crop alfalfa being cut and stacked. Cattle fattening on cured range. About a dozen horses attacked with encephalomyelitis in county. Some movement of cattle to market. About 50% of lambs contracted.

PHILLIPS: Light local showers. Warm, growing conditions good. Harvest of grain crops well under way by binders and combines. Yields reported thus far indicate that production for county will be considerably less than anticipated earlier. Harvested grain running light because of rust damage. Considerable grasshopper damage already done and serious damage being done to late crops. Migrating hoppers still moving into county. Livestock conditions good. No further reports of sleeping sickness in horses.

PODERA: Heavy shower Monday. Considerable green heavy wheat drying green, causing shrinkage. Winter wheat samples coming in at 62 to 63 lbs. Few reports of 52 to 53 lbs. of spring wheat, dark and hard. Few yields running 50 bushels, but great many will drop to 30 or even 20 bushels on later seeded crops. Considerable oats and barley bound, and some wheat wherever binders were available. Oats and barley, from feed standpoint, will probably be heaviest crop for many years. Reported yields of barley are as high as 50 bushels. Oats will unquestionably run in neighborhood of 70 bushels. Mustard crop indicates heaviest yield since 1928, is lodging considerably because of the weight and rain. Pastures curing will furnish abundant winter feed. Sleeping sickness in horses widespread.

PRAIRIE: No precipitation of consequence. Hot and dry. Crop yields not coming up to expectations. Grasshoppers doing lots of damage every day. Rust on later wheat is shrinking the crop. Hoppers have moved in on corn and some farmers have cut and shocked it. Flies bad on stock, but they are holding their own. Many reports of sleeping sickness of horses.

RICHLAND: Serious hail storm hit lower end of irrigated project Monday, covering approximately six miles between Savage and Sidney. Corn and beet fields greatly damaged. Many corn fields will not recover and it is estimated the loss on beets will be from three to five tons per acre. Other portions of county received scattered showers. All grain fields in valley are harvested and many are threshing. Yields running 20 to 25 bushels on wheat with yields on oats being less than 10 bushels and up to 40 bushels. Yield reports from various places in dryland where fields are combined are ranging from 4 to 6 bushels with some fields averaging 10 bushels. Estimate that yield through county on oasis of seeded acreage of wheat will not average over 5 bushels. Number of potato fields in valley being affected by purple top which will reduce yield to some extent. Ranges in good condition. No marketing of livestock to date. Grasshoppers still doing damage, particularly to corn and other crops not yet harvested.

ROOSEVELT: Weather warm with showers scattered over county on 8th. Generally favorable for harvesting. Yield and grade of spring wheat lower as harvest continues due to rust and grasshopper damage. Considerable 50 to 52 lb. wheat being harvested. Estimated over 15% abandonment. Corn being damaged by hoppers to some extent. Livestock situation unchanged. Some demand for restocking.

ROSEBUD: Temperature above normal most of week. Light show early in week. Harvest of dry land grain rapidly drawing to close. Irrigated grain mostly cut and threshing under way. Second cutting alfalfa mostly in stack. Grasshoppers continue to do considerable damage to alfalfa seed crop and to gardens. No live-stock sales reported.

SANDERS: No precipitation, growing conditions very poor on account of low moisture. Winter wheat threshing general, fair yield and high quality. Most spring grain in shock with low yield on account of drought. Harvesting second cutting hay completed with short crop. Potatoes poor on dry land. All crops need rain badly. Shortage of irrigation water. Grasshoppers in scattered areas but causing little damage. Livestock in very good condition. Fat lambs going to Chicago markets.

SHERIDAN: Scattered showers throughout county. Some hail damage reported in northeast part. High temperatures. No apparent changes in crop conditions. Due to damage from grasshoppers and rust it appears that about a third of the anticipated crop will be harvested. Much of the wheat is very light and many fields will not be harvested.

SWEETGRASS: Precipitation .12. Grain ripening rapidly. Second cutting hay starting. Winter grains in shock. Early spring grains now being cut. Threshing will start next week. Cattle and sheep doing well. Estimated that 300 horses are or have been affected with encephalomyelitis, estimated 25% loss to date.

TETON: Spring wheat harvest starting in eastern part of county, with some rather light weight wheat appearing. Test weights run from 49 to 56 lbs. Winter wheat running around 60 lbs. per bushel. Spring wheat reported yields vary from 12 to 25 bushels. Winter wheat yields 15 to 30 bushels, occasional field yields 35 bushels. Spring wheat harvest will not start generally for about two weeks. Considerable swathing of crops in Pendroy-Farmington areas. Wild haying about half done.

County summaries of crop conditions for the week ending August 13, 1938 - Page 4.

TOOLE: Considerable damage past two weeks to wheat yields, from shriveling. Combining will start generally next week. First yields not extremely high, and wheat generally is of 53 to 55 lbs. in spring wheat. Winter wheat has been weighing as high as 63 or 64 lbs. and is generally in good shape. Cattle and sheep in good condition. About 200 horses have sleeping sickness, losses around 20%. Disease is particularly trying in Sweetgrass Hills area, where they have the largest hay crop in many years and fewer horses.

VALLEY: Harvesting in full swing. Fields turning very rapidly. Hoppers still doing damage. Number of fields abandoned due to damage by hoppers and rust. Yields running much lower than expected, wheat weighing out very light. Much harvesting done with binders and windrower. In northern portion, grain being cut green. Sugar beets looking good. Reports of some damage by grasshoppers. Livestock lost some weight due to flies and mosquitoes, but looking good. Present outlook is plenty of feed with small amount of stock to feed it to. Some inquiries to where stock might be purchased.

WHEATLAND: Continued warm weather with light shower middle of week. General growing conditions continue good in all parts of county. Harvesting of winter wheat in full swing in southern portion. No great damage to crops reported due to grasshoppers. Purple top causing some damage to potatoes. Sleeping sickness in horses still reported in all parts of county with some loss.

WIBAUX: Precipitation at Wibaux, .20, northern part .75, southern part .35. Weather hot. Combining and threshing in full swing. Average yields poor due principally to grasshopper damage, which will be 60%, and rust will take another 10%. Majority of yields from 3 to 7 bushels. Nearly all of No. 1 quality. Very small percentage, if any, of corn will develop ears because of hopper damage. Most corn will be cut as soon as possible.

YELLOWSTONE: Precipitation .10 inch. Hot days, cool nights. Harvesting of fall grains in full swing. High yields reported in practically all parts of county. Corn, beets and beans in excellent. Some farmers report complete loss of potato fields from purple top, others getting fair results with lime sulphur spray. Cricket infestation slowing down. Outbreak of sleeping sickness among horses reported. Many farmers losing horses and others report horses sick but not serious. Other livestock in good condition. Range grass good. Surplus of labor.

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Jay G. Diamond, Sr. Agr. Statistician.  
T. J. Kuzelka, Jr. Agr. Statistician.

Helena, Montana  
August 16, 1938

UNITED STATES DEPARTMENT OF AGRICULTURE  
Bureau of Agricultural Economics — Weather Bureau

**REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA**  
For the Week Ending Tuesday, August 23, 1938.

*Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau.*  
Offices: Federal Office Building, Helena, Montana.

Cooler weather and light scattered showers along with the more generous rainfall of the preceding week have resulted in better filling of late maturing grains as well as improved growth of feed crops and pastures. Below normal temperatures prevailed most of the week, and were accompanied by light frosts with slight damage to gardens in scattered localities on the 19th, and by a little snow on the higher mountains.

Showers again caused some interruption to harvesting, threshing, and haying operations, but generally to a lesser extent than during the preceding week. Delay in harvesting caused some over-ripening of grain and some breaking down. Small grains have ripened, except in a few north-central areas, and harvesting is reported from half done to completed. Combining has been more delayed than binding and heading largely because of lodged conditions and weed growth. Dryland harvesting is more advanced than irrigated. Threshing is proceeding in all sections; much has been completed. Winter wheat and some early spring wheat are reported making good yields. Much of the spring wheat in northeastern and other areas is of lighter yield than earlier expected, and test weights so far have been mostly lower than normal. Many late seeded fields have been entirely abandoned, in this area. In Foothill County, it is estimated that some yields have been reduced 70% by rust and grasshopper damage. With approach of the winter wheat seeding season, reports indicate mostly excellent moisture conditions in summerfallowed ground in central districts, but poorer conditions in the extreme northwest. Plantings are expected to be reduced materially in the Flathead district unless good rains occur there within the next six weeks. Beets have been progressing nicely. Cool weather has slowed the growth of corn, and may result in some soft grain, much is being cut for fodder with yields reported very good. Potatoes continue poor in southern districts because of blight, and are late and in need of a longer than usual growing season for maturing in some other sections. Early potatoes are being dug. Gardens are mostly good except where severely damaged by grasshoppers in eastern districts. The pea harvest has been completed with normal yields.

Considerable wild hay and second crop alfalfa remains to be harvested, although cutting is being rushed as much as possible. Second cutting of alfalfa is short in northern districts, and growth of much of the new seedings has been destroyed by grasshoppers in the northeast. New plantings are underway.

Ranges are generally in excellent condition with ample feed and water for all livestock. Cooler weather has been more favorable for livestock, reducing insect annoyance, and assisting in the treatment and in checking the spread of sleeping sickness among horses. Additional losses of horses have been reported. Infection has amounted to one-third of the horse population in some southeastern counties, with only 50% of recovery. Vaccination of horses against the disease continues. Insect damage is definitely on the decline and cricket barriers are being removed in some districts.

**TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING AUGUST 23, 1938**

Station	Sunshine			This Week	From April 1st to date	Total Precipitation for Corresponding Period in 1937
	Temperature Highest	% of Lowest Possible				
Billings	92	41	*	0.25	12.88	6.95
Bozeman	85	39	*	0.40	10.98	9.50
Conrad	*	*	*	0.34	9.39	7.77
Cut Bank	80	35	*	0.09	10.12	6.51
Fort Peck	90	48	*	0.02	7.99	4.33
Glendive	94	45	*	0.09	7.95	6.51
Great Falls	85	45	*	0.24	11.00	5.49
Havre	88	44	78	0.28	10.16	7.14
HELENA	83	42	72	0.24	10.77	5.16
Kalispell	80	40	65	0.16	4.87	5.96
Lewistown	86	34	*	0.16	12.52	6.66
Malta	90	40	*	0.06	9.40	6.60
Miles City	92	46	82	0.22	7.4	6.69
Missoula	90	44	68	0.19	7.8	3.69
Poplar	91	41	*	0.02	10.36	5.33
Stanford	*	*	*	0.08	13.70	6.84
Average				0.16	9.84	6.32

\*No Data.



fields will not be harvested due to rust and grasshopper damage. Much light weight wheat has been harvested. No killing frosts to date. No change in live-stock or labor situations.

STILLWATER: Cooler, .13 inch precipitation. Crop conditions continue favorable.

Cooler weather and small amount of moisture favorable for filling of late seeded grain. Estimated that harvesting is more than half completed. Sugar beets in Columbus area look good but there will be considerably less than normal yield in Park City area. Insects not doing any damage to speak of. Live-stock in good condition. Lamb market rather quiet, little movement of cattle to market. No surplus of labor.

SWEETGRASS: Weather varied, partly cool and cloudy, partly hot and clear with cool nights. Frost reported in hills. Local showers retarded threshing. Precipitation .13 inch. Crop conditions good for alfalfa and corn. Practically all other crops matured. Binding and combining of late crops under way. Threshing of earlier crops in full swing. Good yields reported. Livestock in mountains reported in excellent shape. Livestock in lower hills and on farms about normal. Sleeping sickness in horses still severe. Labor situation unchanged.

TETON: No precipitation. Warm weather has hastened ripening of grain, especially in irrigated sections. Some have completed harvesting of wheat in eastern part of county. Test weight much lower than expected, also yields are not running as high as anticipated. Harvesting started west of Choteau. Grasshoppers doing a little damage to flax. Labor supply inadequate.

TOOLE: Good weather for harvesting, which is now in full swing. Crops turning but better than expected, yields running from 15 to 50 bushels. Some areas averaging out better than 30 bushels. Elevators having biggest run in 10 years, one elevator reported biggest day's run in 24 years. Cattle and sheep in excellent shape and ranges and water places excellent. No marked movement to market as yet.

VALLEY: Light shower in northern portion fore part of week, delayed combining but not enough moisture to do any good. Fore part of week partially cloudy and cool, latter part warm to hot. Very dry, in some places impossible to plow. Harvesting of oats and wheat about 85% completed. Winter wheat in western portion of county will run 8 to 25 bushels, averaging around 10 to 12 bushels, test weight 50 and up, mostly grading No. 1 and 2. Southern portion along Milk River, wheat not averaging quite so high, running a little better in test weight. Northern and eastern portions, where considerable rust damage was done, wheat is running as low as 36 pounds, most of it not averaging better than 52 pounds. Many fields being abandoned because of hopper and rust damage. In northern portion of county, wheat will average about a bushel per acre seeded. Will be very little third cutting alfalfa due to hopper damage. Bluejoint haying completed with exception of a very few. Sugar beets look very good. Corn only fair. Corn damaged by hoppers. Hoppers doing very little damage throughout county at present, still have a great number which are laying eggs. Ranges in excellent conditions.

WHEATLAND: Weather cool and cloudy with exception of two hot days, one light rain during week. Spring wheat harvesting has started. No damage reported due to insects. Few cases of sleeping sickness in horses still reported.

WIBAUX: No precipitation. Weather seasonal. Nights cool. Threshing just about completed. Less than 5 bushel average per acre on seeded acres. Average yields very low. 80% of wheat grades No. 1. Grasshoppers still numerous in fields. There will undoubtedly be enough eggs laid this fall for a heavy infestation next year if conditions are favorable for hoppers. Corn improving some since last week's rains. However, yield of ears will be very low. Range being destroyed to some extent by hoppers. Livestock in very good condition. Some feeder steers sold direct to feeders.

YELLOWSTONE: Precipitation .09 inch. Weather warm, cool nights. Most spring grain threshing completed with better than average yields reported. Third cutting of alfalfa started. Bean harvest under way with sugar beet harvest scheduled for last of September. Sleeping sickness epidemic subsided to certain extent, with considerable horses dead. Other livestock in good shape.

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Jay G. Diamond, Sr. Agr. Statistician.  
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middle of week. Harvesting and threshing in full swing, yields fair to good. Some haying in progress. Some second crop alfalfa yet to cut. Beets making fair recovery from webworm damage. Some strawberries coming on market now. Higher ranges in good condition, lower ranges and pastures dry. Cattle in good condition.

MUSSELSHELL - GOLDEN VALLEY: Cooler weather. Very light scattered showers. Harvest operations still going strong. However, many farmers are all done with harvest. All yields reported are still quite high. Corn looks very good, much of it will make grain. Livestock in very good condition.

PARK: Rain Thursday and Friday delayed harvesting temporarily and a hail in Yellowstone Valley did some damage. Harvesting and threshing getting under way with 30 bushel rye and 35 bushel to 40 bushel wheat reported. Winter wheat seeding started. Second crop alfalfa hay under way. Livestock in excellent condition with grass nearly cured. Sleeping sickness still spreading. Labor balanced. Wheat farmers expressing some interest in wheat loans and crop insurance.

PHILLIPS: Light local showers. Warm and dry most of week, no frost reported.

Combining and threshing general with approximately 75% completed. Yields vary from 3 to 30 bushels with probable average of 12 bushels. Grasshopper infestation quite general and severe. Damage varies from slight to as high as 25%, particularly to corn and other late crops. Range and livestock in excellent condition. Labor balanced.

PONDERA: Hot and bright all week. Splendid ripening weather put spring wheat harvest in full swing with combines. Practically all elevators in east end of county are filled to capacity and cannot accept more grain by reason of car shortage. Ledger community averaging 30 to 35 bushels. Some yields around Conrad averaging 36 to 38 bushels, and weighing 56 to 57 pounds. Ledger community weighing around 59 pounds. Other reports indicate summer-fallow wheat will probably yield up to heavy dark northern grade, and protein varies from 11% on heavy weight grades to as high as 16% reported. Feed crops approximately 65% harvested. No yield reports. Lambs being contracted at 6 $\frac{1}{2}$ ¢ and 7¢, for delivery beginning of next week. Lambs on range in advance of normal years so far as weight is concerned, tops running as high as 90 pounds. Sleeping sickness continues very severe, many farmers now vaccinating. Labor balanced.

PRAIRIE: No precipitation. Weather warmed up latter part of week. Considerable threshing taking place in all parts of county, yields are disappointing. Livestock in good condition and should improve as soon as flies disappear as ranges are better than for some time. Considerable sleeping sickness among horses.

RICHLAND: No precipitation, rather good growing weather. Harvesting of small grains still in progress, particularly with wheat, threshing both from the shock and combining. Reports continue low, average yield for county estimated around 5 bushels in dry land area with 20-25 average for wheat under irrigation. Some corn being cut and put into trench silos. Quite a number of trench silos being built particularly by valley farmers for storing corn and sugar beet tops. Beet fields hit by hail two weeks ago are beginning to show good progress altho it is estimated these fields will be reduced from 3 to 4 tons per acre. Second cutting alfalfa being made but crop is very low and many farmers will not have a second cutting due to grasshopper damage. No marketing of livestock.

ROOSEVELT: Weather cooler with some precipitation early in week causing some delay in threshing. Threshing continues in most sections with yields about same as previously reported. Combining about through with many fields of late wheat abandoned. All but early flax severely damaged by grasshoppers, many fields totally destroyed. Considerable corn and cane cut past week. Livestock continues in excellent condition.

ROSEBUD: Normal weather prevailed. Some cloudy weather but no rain of any consequence. Threshing practically completed. Corn maturing rather slowly. Large amount of soft corn in prospect. Potato crop very light, due mostly to purple top. Grasshoppers thinning out but indications point to heavy deposit of eggs. Livestock continues to improve. No activity in either cattle or sheep sales reported during week. Several bunches of horses vaccinated for sleeping sickness.

SANDERS: No precipitation. Clear and very dry. Growing conditions poor except under irrigation. Irrigation water very low. Threshing winter wheat well advanced. About 70% normal crop but high quality. Harvesting spring grain generally completed with low yields from drought. Second cutting hay in stack. Very short crop on dry lands. Outlook for alfalfa and clover seed crop very good. No insect damage at present. Heavy depositing cricket and grasshopper eggs on crop lands. Outlook for heavy infestation in 1939. Livestock in very good condition. Heavy marketing of fat lambs to eastern markets.

SHERIDAN: Scattered showers first part of week. Weather conditions normal for season. Harvesting nearly completed in most parts of county. Many

good weather required before majority of combining can be completed. Many fields shocked.

FLATHEAD: No precipitation. Warm and sunny. Harvesting progressing nicely. Pastures very short. Livestock in good condition.

GALLATIN: Decreased temperatures, partly cloudy. Occasional local showers of no benefit for moisture. Combining winter wheat continued and well under way on spring wheat, threshing also in full swing except when delayed because of showers. Pea harvest, both canning and seed, completed. Alfalfa being stacked. Considerable amount of wheat being shipped for Government loan purposes to terminal markets. First wheat loan check received. Some shortage of irrigation water and moisture content in summer fallow ground somewhat low. Local breeders planning bull sale for October. Shortage of feeder pigs evident. Pastures and range still in excellent condition.

GARFIELD - PETRCLEUM: No precipitation. Generally clear with warm days and very cool nights. No frost reported as yet. Combining, heading and binding complete or nearly complete, with threshing under way. Wheat yield reports continue to vary from 3 to 30 bushels, the better yields occurring in more desirable crop areas where grasshoppers fortunately were not extremely severe. Corn indicates varied damage. Fodder still being harvested in some cases in better fields. About 50% of ears are filling enough to produce grain. From standpoint of corn and of crops to be fall seeded, additional moisture would be desirable. General livestock condition is as previously reported, with an apparent slackening up in number of cases of sleeping sickness in horses. Very little movement to market for any class of livestock. Few early lambs weighed out of Winnett averaging better than 80 pounds.

GLACIER: Temperatures close to freezing early part of week. Light frost reported west of Cut Bank. Temperatures warm and drying latter part of week, good ripening weather. Harvesting starting strong in southern part of county. General yields reported from 20 to 30 bushels. Crops in northern part showing considerable immaturity. Second crop of alfalfa being cut. Some hoppers coming in on to oats and green wheat from prairies doing some damage and cutting off some heads. Damage will not be large. Prairies getting quite dry causing some apprehension with regards to prairie fires. Cases of sleeping sickness still being reported although epidemic is slackening.

HILL: Precipitation .01 inch. Ideal harvest conditions prevailed. Wheat harvest approximately 50% completed. Late seasonal rains have had a tendency to bleach wheat to a considerable extent. Yields running from 8 to 30 bushels. Ranges in good condition. Some damage from grain bugs reported. Livestock in good condition. Labor balanced.

JUDITH BASIN: Precipitation slight and scattered. Temperatures moderate. Harvest of fall wheat over half done. Spring grain harvest in full swing. Wheat yields running from 15 to 40 bushels per acre. Crickets and hoppers not doing any damage. Most of range grasses have turned ripe and haying is still continuing on many ranches. Stock in excellent condition. Apparently none moving to market as yet. Labor balanced.

LAKE: Showers over entire county ranging from light precipitation to heavy rain. Weather seasonable with warm days and nights getting cooler. Grain and hay harvesting nearing completion. Sugar beets and potatoes making good growth. Some new seeding of alfalfa and red clover being made. Harvesting of alfalfa and red clover seed well under way. Cattle and sheep in excellent condition due to improved range. Sleeping sickness in horses continues to increase.

LEWIS & CLARK - BROADWATER: Small amount of precipitation has hampered haying and harvesting operations slightly. Rather warm weather suitable for crop growth. Wheat yields holding up to expectations. Potato yield prospects will be determined by fall weather as growth is late. Sleeping sickness in horses still a problem in both counties. All classes of stock in good condition.

MADISON - JEFFERSON: Cool most of week, light showers. Growing conditions good. Threshing well under way. Pea threshing about half done. Production not as high as estimated. Second cutting alfalfa about normal. Early potatoes on market. Sleeping sickness in all parts of Madison County and around Boulder in Jefferson, loss quite heavy. Some surplus of labor.

MEAGHER: Light showers, one light frost. Most winter grain now cut. Very little spring grain yet cut. Possibility of some spring grain being caught by frost. Threshing progressing very slowly. Livestock in excellent condition. No sales to report past week. Probably 100 cases of sleeping sickness in horses, still on the increase. Labor supply and demand about equal.

MISSOULA: Cloudy first of week, warm and bright last part. Some light showers  
(Continued on Page 3.)

The following summaries of crop conditions for the week ending August 27, 1938 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: Local showers throughout county, temperatures cooler. Wild hay harvest practically finished with good yields of high quality hay. Harvesting peas and grain in Beaverhead Valley under way. Lambs inactive. About 20 cases of sleeping sickness in horses reported.

BIG HORN: Warm and dry, no precipitation. Crops maturing rapidly. Winter wheat harvesting nearing completion and threshing of irrigated crops under way generally. Beets, corn and beans making splendid progress; potatoes and tomatoes somewhat short due to purple top. Second crop alfalfa hay practically all in stack, tonnage somewhat below normal. Range and livestock in good condition. Few cattle have been marketed. Big demand for feeder pigs. Horses still sick with sleeping sickness. Ample labor. Insect control work drawing to a close.

BLAINE: No precipitation. Clear sunny days with normal temperatures. Harvesting of small grains well under way in all sections. South of Milk River crops making good yields with wheat running around 20 to 25 bushels, grading No. 1. Crops in north end of county running 10 to 15 bushels with large portion grading No. 4 and 5 due to low test weight. Sugar beets and corn making exceptionally good growth. Indications are very favorable for satisfactory yields. Livestock and range in excellent condition.

CARBON: Temperatures in Carbon County ranged from minimum of 35° in Red Lodge territory to maximum of 86° in Belfry area. Very slight precipitation in southwest section. Very dry. Threshing and combining continues. Harvesting of beans in full swing, particularly Great Northern variety. County spraying of perennial weeds started. Livestock conditions excellent. Sleeping sickness among horses very prevalent with considerable vaccination being reported. Labor plentiful.

CASCADE: Intermittent showers delayed harvesting, and farmers somewhat concerned about the delay and possible damage to grade of wheat resulting from such moisture. Yields have been reported as high as 50 bushels per acre. Most winter wheat yielding between 30 and 40 bushels. Spring wheat yields disappointing. Test weight per bushel and grade being low. Crops on irrigated land in excellent condition and indications are for good yields on all crops excepting potatoes which have suffered from Purple Top, which made its appearance in this area for the first time this year. Livestock in excellent condition. Labor normal.

CHOUTEAU: Ideal for harvesting except few light showers have delayed a few hours. Winter wheat yields reported higher than expected. Spring wheat yields lower than expected, due to light weight. Over 2,000,000 bushels already handled through elevators in county. Sales running slow due to price. Livestock and labor situation unchanged. Mormon cricket control program almost completed. Some grasshopper damage expected on winter wheat.

CUSTER - POWDER RIVER: Fair and warmer, one very light shower. Threshing of grain crops practically finished. Yield on irrigated land fair to good, and on dry land fair to poor. Some alfalfa seed being harvested in Powder River County. Seed crop will be small volume compared to pre-drought years. Beets and other irrigated crops continue good growth. Water supply still sufficient in Tongue River. First shipments of cattle to market this week. Yearlings weighing heavier than average. Few lambs sold in range of 6¢ to 7¢, but no deliveries to date. Grass and water ample and all stock doing well. Horses still affected with sleeping sickness. Reported losses about 10% or less.

DANIELS: Some rain in most parts of county delaying harvesting to some degree. Generally calm and cool with some frost reported in southern part. Harvesting of wheat more than 75% completed. Many fields will remain uncut due to extremely low yields. Less than 30% of wheat fields yielding enough to meet harvesting expense. Majority of wheat falls in sample grade due to low test weight. Epidemic of sleeping sickness in horses tapering off with less losses reported. Cattle and sheep in good condition. Considerable demand for stock. Labor situation unchanged. Grasshoppers still damaging gardens and late feed crops. Few scattered Mormon crickets cause some worry among farmers for next year's operations.

DAWSON: Weather rather cool throughout week, no precipitation. Cutting and harvesting continues with little change from previous reports. Farms generally are approaching the final end of harvesting. General range conditions remain unchanged.

FALLOON - CARTER: Light showers. General growing conditions for corn, fair. Practically all grain crop harvested. Threshing from header stacks and field threshing. Livestock conditions fair. Sleeping sickness in horses letting up.

FERGUS: Harvesting in full swing. County average about 20 bushels. Two weeks (Continued on Page 2:)



UNITED STATES DEPARTMENT OF AGRICULTURE  
Bureau of Agricultural Economics — Weather Bureau

REPORT OF WEATHER AND CROP CONDITIONS IN MONTANA  
For the Week Ending Tuesday, August 30, 1938.

Issued jointly by the Bureau of Agricultural Economics and the Weather Bureau  
Office: Federal Office Building, Helena, Montana.

Weather conditions were generally favorable for the advancement of harvesting, threshing, and haying operations during the week ending August 30th. Temperatures averaged well above normal, and there were no reports of frost. Bright sunny skies predominated, and precipitation consisted of a few scattered showers, which were generally too light to be of benefit to growing crops, or of hindrance to harvesting activities. Most wild hay is now in stack with yields mostly reported heavier than usual and of fine quality. The greater part of the second crop of alfalfa has also been cut, and a start has been made in the Yellowstone Valley on the third crop. Yields of second alfalfa have been mostly light in northern and eastern sections with much damage in the northeast resulting from grasshoppers.

Spring grain harvest is in full swing in the late maturing central counties, but has been largely finished in other sections of the State. Some spring grain is very late and will likely be damaged by frosts before reaching maturity. Threshing continues generally, but is mostly completed in the southeast except for some irrigated crops. Yields of winter wheat continue generally good, but yields of much spring wheat appear to be lighter than expected. Poor yields have been reported from extreme northeastern counties, where rust and grasshopper damage was severe, and some abandonment of crops occurred. Storage and handling facilities of grain elevators in central counties are reported near capacity, with much of the new grain crop expected to be stored on farms. Seeding of winter wheat has been started in a few localities with favorable soil moisture conditions. Rains are badly needed in the extreme northwest for fall plowing and seeding.

Cutting of corn for fodder continued, although hot, sunny weather of the past week materially improved the outlook for a grain crop, where conditions are not too backward, and the crop has not been seriously damaged by grasshoppers. Flax and beets progressed and are in good condition. Gardens are maturing nicely except for tomatoes which are slow. Potatoes continue poor in the south but are doing well in the remainder of the State except for being a little late. Beans are good with harvesting underway in Carbon County.

Livestock conditions remained unchanged except for some decline of sleeping sickness among horses in eastern districts. Very little marketing of livestock has occurred to date. There is some demand for feeder cattle. Range conditions remained good, but pastures are in need of rain. Flathead County reported pastures short and continuing to deteriorate. Grasshoppers and crickets have been observed laying heavy deposits of eggs in scattered localities, but damage to range and late crops has materially decreased.

TEMPERATURE AND PRECIPITATION DATA, WEEK ENDING AUGUST 30, 1938

Station	Temperature		Sunshine		Total Precipitation	
	Highest	Lowest	% of Possible	This Week	From April 1st to date	For Corresponding Period in 1937
Billings	91	53	*	0.08	12.96	7.03
Bczeman	83	56	*	0.10	11.08	9.50
Conrad	*	*	*	0.16	9.55	8.11
Cut Bank	90	40	*	T	10.12	6.52
Fort Peck	96	46	*	0.00	7.99	4.33
Glendive	97	46	*	0.00	7.95	6.58
Great Falls	90	50	*	0.15	11.15	5.73
Havre	92	46	90	0.00	10.16	7.56
HELENA	85	54	79	T	10.77	5.16
Kalispell	88	50	88	0.02	4.89	5.96
Lewistown	83	43	*	0.08	12.60	6.77
Malta	97	41	*	0.00	9.40	6.69
Miles City	96	54	80	0.03	7.67	6.69
Missoula	96	54	84	0.07	7.85	3.78
Ponlar	99	41	*	T	10.36	5.33
Stanford	*	*	*	0.11	13.31	6.88
Average	-	-	-	0.05	9.89	6.41

\* No Data.

W. E. Maughan, Weather Bureau.  
Jay G. Diamond, Bur. of Agr. Economics.

TETON: Precipitation .12 inch. Maximum temperatures from 63° to 81°, lower than normal. Cloudy most of week. Spring wheat yields lower than anticipated. Farmers busy repairing grain bins. Spring wheat harvest in full swing in eastern part of county. Weight of harvested spring wheat below expectations. Sleeping sickness in horses caused considerable alarm. Some are vaccinating.

TOOLE: Scattered showers throughout entire week. Cool days and nights. Moisture stopped harvesting most of week, but has helped wheat considerably and yield is looking up some from last week. Most of wheat is from 56 to 58 pounds with protein a little lower than usual. Crops running 10 to 40 bushels with bulk between 18 and 25. Good percentage of wheat is being cut by binder and shocked. Little information available on yields. Sleeping sickness in horses not as severe past week. Cold weather seems to be of help in checking the disease.

VALLEY: Cool and cloudy with exception of two very hot days. Local showers first of week ranging from light precipitation to good rains. Harvest of small grains in southern portion of county nearing completion. In northern portion well under way, with large number of fields being abandoned due to rust and hopper damage. Bluejoint haying almost completed. Harvesting of western wheatgrass seed well under way. Hopper infestation preventing much of a third cutting alfalfa. Sugar beets making good growth. Fields heavily infested with grasshoppers, particularly in northern portion, but hoppers doing very little moving. Livestock gaining a little weight due to cool weather and less flies and mosquitoes. No demand for labor at present time.

WHEATLAND: Cool and cloudy. Light rains general throughout week. Light frost reported Saturday morning. Harvesting of winter wheat still in full swing with some 25 to 30 bushel yields reported. Some new cases of sleeping sickness in horses reported.

WIBAUX: Precipitation at Wibaux 1.35, northern part 1.95, southern part .85 inch. This will help corn and millet of grasshopper damage stops. Threshing and combining well advanced. Average yield for county undoubtedly less than 5 bushels. Less than 20% of oats and barley harvested, yielding 10 bushels and less. Hoppers damaging ranges but thus far ranges are good and livestock in good flesh. Sleeping sickness in horses still prevalent, 50% less at present.

YELLOWSTONE: Precipitation .88 inch. Cool days and cold nights. Cloudy weather. Two-thirds of irrigated grains harvested. Practically all dry land and winter grains harvested with some 50 and 60 bushels dry land and winter wheat yields per acre recorded. Yields on all crops excellent, except potato crop. Some sleeping sickness of horses. Estimate one-third of horses in county affected. Grazing conditions excellent. All other livestock in good shape. Surplus of labor.

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Jay G. Diamond, Sr. Agr. Statistician.  
T. J. Kuzelka, Jr. Agr. Statistician.

Helena, Montana,  
August 24, 1938.

PHILLIPS: No precipitation. Cool last part of week. Growing conditions good. Harvesting general. Yields lower than anticipated in most communities. Principle damage done to wheat has been caused by rust, though some late fields were heavily damaged by grasshoppers. Migrating hoppers still coming in from southeast and doing considerable damage to gardens and corn. Livestock condition and range excellent. Labor balanced.

PONIERA: Mostly cool and cloudy, shower on Friday. Light frosts latter part of week. Spring wheat harvest in full swing with considerable binding. Combining delayed because of moisture. Winter wheat harvest practically complete. Test weight 62 or 63 pounds on some samples. Some swathing in Valier region. Spring wheat showing low test weight from stubbled in and sod plantings. Few protein samples running 16.5%, winter wheat 12.5%. Considerable oats and barley still green due to late seedings. Indications of heavier yield than any crop since 1928 on dry land. Pastures will enter winter in finest condition in past decade with abundance of seed and feed. Feed reserves will be ample and considerable hay available for sale. Some lambs contracted for  $6\frac{1}{2}\%$  and some for  $6\frac{3}{4}\%$ , growers asking 7¢. Most lambs contracted. Sleeping sickness in horses continues and indications past few days are that death losses are increasing, especially among work horses and saddle horses. Labor balanced.

PRAIRIE: Small amount of moisture with cool temperatures. Threshing under way with yields not as good as anticipated. Many farmers cutting and shocking corn as hoppers are moving in from harvested wheat fields. Livestock in good condition. Sleeping sickness prevalent among horses in all parts of county.

RICHLAND: Slight precipitation over county delayed threshing and combining to some extent. Harvesting under way in all parts of county with yields very low. Irrigated wheat running mostly 20 to 25 bushels with probably 6 bushels average dry land yield. Few growers reported yields as high as 18 bushels. Estimated that hoppers and rust cut yield of grain approximately 70% as average for county on basis of wheat acreage. Hopper damage still continuing particularly on corn, alfalfa and beets. Second cutting hay being put up, light crop in most cases. Majority of growers will not get more than two cuttings of alfalfa this year due to hopper damage. Most new stands of alfalfa pretty much destroyed by hoppers. Some new seedings of alfalfa now being planted by valley growers. Livestock in good condition but no marketing to any extent. Many growers desirous of getting additional breeding stock providing finances can be arranged. Large number of trench silos being built by irrigated growers for use in storing corn and potato tops.

ROOSEVELT: Generally cooler, slight precipitation. Major portion of spring wheat cut with threshing of bound grain under way. Yield of early wheat cut with binders averages around 12 bushels of good quality wheat. Much of later wheat not worth threshing. Majority of later combined fields averaging 3 to 5 bushels of low quality wheat. Grasshoppers continue to damage corn in some fields with some being cut to prevent further loss. Feed crops generally good. Range improved by rains of previous week. Most grasses cured. Large amount of feed put up with few stock to winter.

ROSEBUD: Hot weather prevailed first half of week, last half cool. Rain general over county Thursday. Harvesting practically completed. Threshing delayed because of rain. Wheat yields under irrigation not up to early estimates. Cool weather retarded maturity of corn. Only fair crop with much soft corn in prospect. Sugar beets growing well but rather spotted. Potato crop very light because of purple top damage. Grasshoppers continue to damage corn, indications are for heavy egg deposit. Condition of cattle and sheep continues to improve with ideal range conditions. Sleeping sickness taking heavy toll of horses throughout county.

SHERIDAN: Heavy rain in scattered areas Monday. Temperatures seasonal. As previously reported, rust and grasshopper damage has caused the abandonment of about  $1/3$  of the wheat crop. Much of the wheat is light.

STILLWATER: Generally cool. Precipitation .29 inch. Favorable weather for crop growth. Harvest in full swing with good yields reported. Most of wheat low in protein. Second cutting alfalfa nearly all up. Hay of good quality. Potato yields reduced due to purple top. Damage from grasshoppers and crickets practically over for year. Livestock in good condition. No heavy movement to market. Lambs being contracted from  $6\frac{1}{2}\%$  to 7¢. Several hundred horses reported affected with sleeping sickness. No surplus labor.

SWEETGRASS: Precipitation .10 inch. All grains except late spring grains now in shock. Threshing getting under way. Yields good. Corn crops below normal. Potatoes late and affected by purple top. Second cutting alfalfa normal. Cattle and sheep gaining. Sleeping sickness in horses still serious. Labor normal.

FLATHEAD: Cool and cloudy with few scattered showers. Harvesting progressing nicely. Practically no reports of yields as high as last year, with few reports of yields as low as 50% of last year. Moisture reserve very deficient and few people planning on seeding winter wheat unless moisture conditions greatly improve during next six weeks. Even with favorable moisture there will be some reduction in winter wheat acreage. Pastures very short. Range livestock continues in good shape.

GALLATIN: Weather cool., local showers latter part of week. Light frosts in parts of Valley Friday evening. Threshing and combining in full swing. Vining peas near completion and threshing of beans continues. Second crop alfalfa well under way. Harvesting of early potatoes started. Pastures and ranges still in excellent condition. Surplus of labor.

GARFIELD - PETROLUM: No precipitation. Generally cool with several cloudy days. Harvesting of small grains in full swing with binding and heading practically complete and combining approximately 50% complete. Spring wheat yields reported from 5 to 20 bushels. Fields with over 50% grasshopper damage have made 10 and 11 bushels. Corn being severely damaged by grasshoppers in most areas. Livestock conditions continue very good with pastures sufficient. Grasshopper damage to range grasses increases daily in infested areas. Estimated 30% of all horses affected with sleeping sickness. Approximately one-half sick horses have recovered. Very little movement of any livestock noted to date.

HILL: Precipitation .27 inch. All grain practically ripe. Harvesting delayed due to rain. Some grain breaking down. Harvesting about 25% complete. Ranges in very good condition. Very little damage reported from insects. Livestock in very good condition. Labor balanced.

LAKE: Partly cloudy and cool with frequent scattered showers. Snow flurries on high ranges. Harvesting of grain and alfalfa delayed because of showers. Potatoes and beets making excellent growth. Pea harvest completed with normal yields. Livestock in excellent condition. Two cases of sleeping sickness reported. Cricket campaign closed with satisfactory results. Grasshoppers not doing any damage.

MADISON - JEFFERSON: .5 inch precipitation, general over both counties. Snow high on Tobacco Root Mountains. Cool most of week. Good harvesting conditions, pea threshing under way. Pastures excellent. Ranges good. Livestock in good condition with plenty of feed and water. Some sleeping sickness among horses with small loss so far. About 150 vaccinated last week in South Boulder.

LEWIS & CLARK - BROADWATER: Generally very cool with people fearing early fall frosts. Frost reported at Lincoln, which has high altitude. Farm work is rushing as larger than usual hay crop is not yet in stack and grain harvesting is under way. Relatively late spring and cool weather during summer will delay maturity of many crops. Potatoes late in maturing and late frosts will be necessary in order for crop to mature. More wheat than usual will likely go into storage because of price. Stock in general in good condition. Sleeping sickness in horses causing occasional losses. Some lambs have been sold.

MEAGHER: One good rain. Frost Friday night, no damage to grain and hay. Days cool. Temperatures little low for good growing conditions, otherwise excellent. Some operators completing hay harvest. Reported excellent. Only one threshing job in progress so far, reporting 12 bushels per acre of winter rye. Ranges in splendid condition. Grass about 60% cured. Livestock in excellent condition. No sales reported past week. 29 cases sleeping sickness in horses reported, estimated total 50, with 12 cases proving fatal. Demand for labor still using up available supply. No insect damage as yet except to gardens by grasshoppers principally.

MISSOULA: Cool and cloudy most of week. Good shower middle of week. Harvesting and threshing slowed up by rain. Good yields reported where threshing is completed. Still considerable hay to be put up. Sugar beets and potatoes making good growth. Recent rains will benefit pastures and ranges. Livestock in good condition. Labor balanced.

MUSSFLSHELL - GOLDEN VALLEY: Hot first part of week, cooler latter part, with local rains which slowed down harvest operations. All reports of yields are very good, highest on winter wheat being 52 bushels, lowest 15 bushels. Harvest is about 50% complete. Livestock in good condition.

PARK: Rain general Thursday and Friday, delaying harvest and haying. Cold nights with below freezing temperatures. Snowfall in mountains. Slight frost damage to gardens in higher altitudes. Harvest under way in all parts of county, though checked by rains. Good yields being reported. Second crop haying under way. Excellent condition. Few shipments of livestock to market to date. Labor balanced.

The following summaries of crop conditions for the week ending August 20, 1938 are furnished through the courtesy of Director J. C. Taylor, Montana State Extension Service.

BEAVERHEAD: Rains over most of County, cooler temperature. Frosts with no damage except to gardens. Harvesting under way with good yields reported. Very small amount of damage by hail for this summer. Pea crop yielding good. Very few lambs sold to date at prices from \$6.50 to \$6.85. Practically all wool out of warehouse.

BIG HORN: General light rain first and last of week which continued good growing conditions but slowed up harvest somewhat. Combining still going on, somewhat slower due to conditions not met with before, such as lodging grain and weeds. Average yield for county will be considerably over average for past few years. Spring wheat being harvested. Valley crops in general making splendid progress. Beets and corn especially forging ahead. Potatoes still hurt by purple top, though some farmers are spraying with lime sulphur with varied results. Hay crop abundant. Livestock in good condition. Labor ample. Insects gradually diminishing.

BLAINE: Heavy rain in northern part of county Sunday. Balance of week cloudy and cool with intermittent showers over county. Due to rainy weather, harvest has been somewhat delayed. Approximately 50% of grain crops have been harvested. Potatoes and sugar beets in Milk River Valley making good progress. Livestock and range in excellent condition.

CARBON: .43 inch rain in Red Lodge area during week, light rain in Belfry on 14th. Temperatures ranged from 34° to 80° in Red Lodge area and 52° to 92° in Belfry. Cooler days and nights prevailed. Combing and threshing of small grains continues with good yields reported. Spraying of weeds started. Mormon cricket work coming to close, barrier being taken up. Livestock conditions good. Sleeping sickness in horses very prevalent over entire county with losses being reported.

CASCADE: Intermittent showers and cool cloudy weather have delayed harvesting of wheat. Precipitation also retarding to some extent quality of wheat being harvested. Yields of winter wheat continue to turn out as expected but spring wheat yields are disappointing. Test weight of spring wheat also low. Summer fallow is in excellent condition for seeding of winter wheat. Crops on irrigated land show promise of excellent returns. Livestock in excellent condition. Labor situation normal. Weed control work will get under way next week. All insect activities are at a standstill.

CUSTER - POWDER RIVER: Cooler with scattered light rains and showers. Harvesting of all grain crops practically over, although threshing will continue for short time. Sugar beets making good development. Late potato yields apt to be low due to purple top damage. Stacking of wild hay continues. First shipments of cattle moved this week. More stuff ready to go soon. All range stock in good condition. Sleeping sickness still prevalent in horses. Grass and timber fire in Volberg country in south Custer County Tuesday covering about a half section. Extinguished by local ranchers within few hours.

DANIELS: Weather generally cool all week. About one-half inch rain in most parts of county for part of week. Some hail damage reported in northwest corner. Harvesting of small grains over half completed. Wheat yields range from 3 to 10 bushels with very low test weight in most cases. Many fields will not be harvested due to rust. Grasshoppers still damaging corn and other feed crops to considerable degree. Livestock situation unchanged with enough feed available to carry them through winter. Labor situation unchanged.

DAWSON: 1.25 inch rain early in week, followed by cool weather with some scattered showers. Temperatures generally below normal. Wheat cutting at least 80% completed with threshing getting under way in many parts of county. Yields running about 5 bushels. Scattered fields of corn being cut. Some yielding good grain, others practically none. Fodder, however, rather heavy. Livestock conditions remain good, though hoppers have damaged range in some sections.

FALLON - CARTER: Precipitation .31 inch. Poor to fair growing conditions. Corn crop in need of moisture. Harvest practically all completed in counties. Average yield of wheat per acre below county average for ten year period. Although most of crop harvested large percent of grain not threshed from header stacks. Livestock in fair condition. Very little winter feed put up in southern Carter County due to short moisture and grasshoppers.

FERGUS: Showers delayed harvesting operations. Some wheat now standing that should be combed as operators have been unable to get to it fast enough for best results. Wheat running all the way up to 40 bushels. Protein on winter wheat reported as high as 16, with most of it 14 or better. Considerable spring wheat showing slight shriveling. Both winter and spring wheat heavy. Lambs beginning to move to market. Cattle and sheep in excellent shape. Grasshoppers reported in eastern Fergus County apparently from migratory hoppers. Since first reported as being thick they have apparently moved on as there are considerably fewer hoppers than last week.